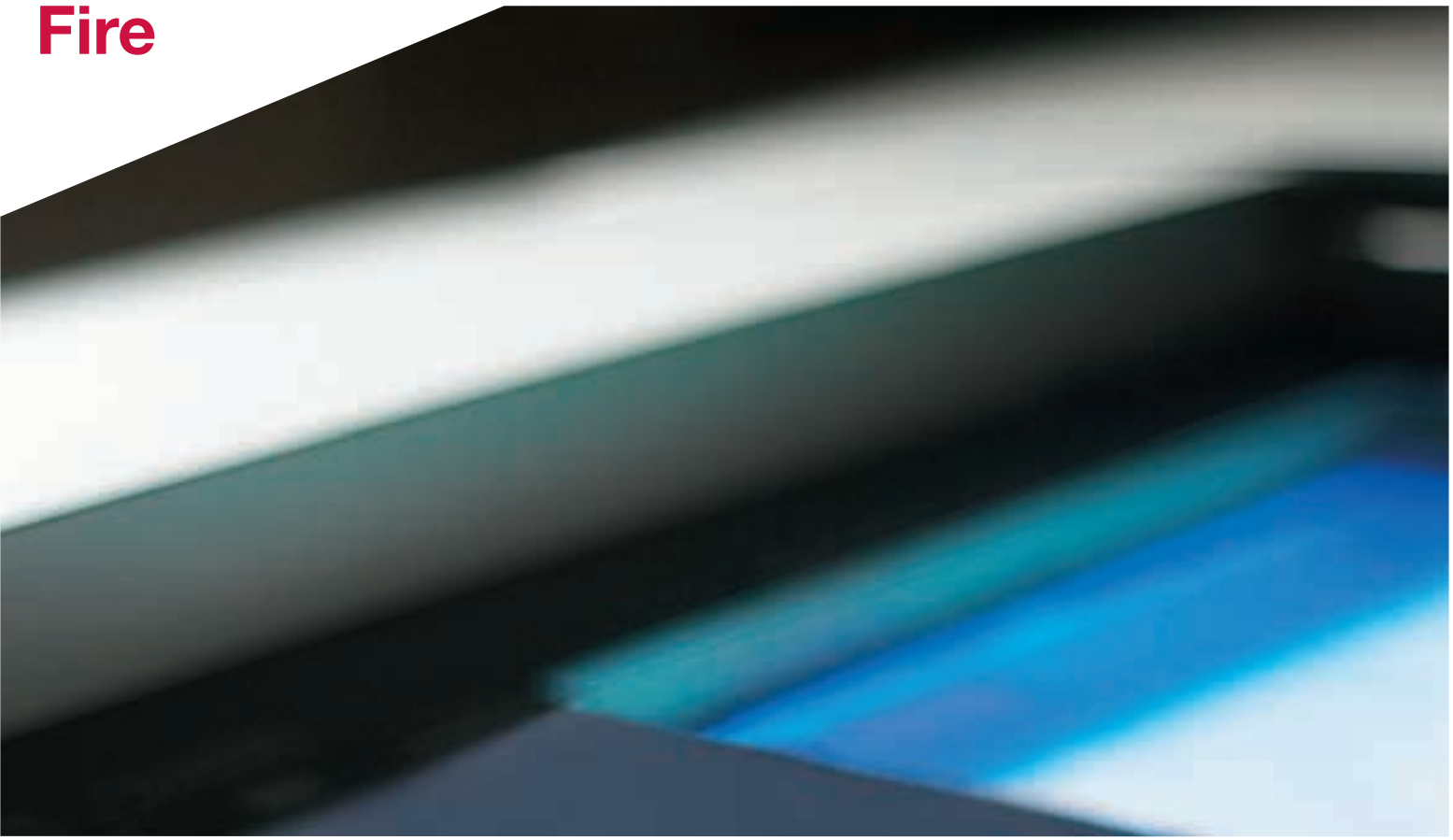
Fire



Fire Product Catalogue

COOPER Safety

COOPER

MENVIER

Jsb

Cooper Profile

Cooper Fire offers a comprehensive range of fire detection products suitable for a wide range of projects, from a small simple installation to a large complex multi building site. Fire detection systems are marketed under the Cooper Fire, Menvier and JSB brands.

This catalogue contains a number of new innovative products including Wireless Fire system, Public Address and Voice Alarm system, Bi-Wire patented panel and the patented Self-Check conventional detector. The many innovative new and improved products featured in this catalogue demonstrate the commitment of Cooper Fire to remain at the leading edge of fire alarm technological development.

Cooper Fire manufactures a wide range of products and offers complete fire system solutions, not just individual components. A complete system can be specified from a single source, confident in the knowledge that all the components have been specifically designed and tested to ensure that they are all fully compatible with each other and will function as a truly integrated fire detection and alarm system.
It is absolutely vital that all elements of a fire detection system are fully compatible with each other. To support this philosophy, a large multi disciplined research and development team is based at the Cooper, Doncaster facility, responsible for the integration of the very latest technology into the design of our comprehensive range of fire products.

Cooper Safety is a leading manufacturer of emergency lighting, security, fire detection and notification systems also offering lighting fixtures, and electrical installation materials.

Our well-known brands and products can be found in a whole variety of industrial, commercial, and domestic settings providing protection to both life and property by offering fire and security detection, and escape route illumination in the event of an emergency. Under normal conditions our products offer professional lighting solutions and high specification installation materials.

Headquartered in Royal Leamington Spa, England, Cooper Safety comprises 11 different operating companies located in the UK, mainland Europe and North America. Together these businesses utilise in excess of 1 million square feet of modern manufacturing and warehousing space, and currently employ over 2000 people.

Cooper Safety is a division of Cooper Industries, Ltd., a USA based Fortune 500 Company.

Our core values and aims are:

> Investment in people

> To partner with our customers to develop open, long term relationships

> To have an unpretentious, straightforward and honest approach to business

> The continued investment in research and development

> Investment in manufacturing facilities to ensure they remain world class

> To produce products which are in full compliance with standards

> To operate in an environmentally friendly way - in the products we design and the facilities in which we make them

> To have high ethical standards

We believe that our people are the heart of Cooper Fire and that we have the talent, the infrastructure and the will to serve our customers to the highest standard. We would like to thank our many loyal customers for their support over the years and we welcome new customers and look forward to mutually beneficial long-term relationships.

COOPER MENVIER Jsb

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Brand Conversion Chart

Fire

1

Products:

Analogue Panels

CF3000/CF3000GM

R6000

CF2000

CF1100/CF1200

Analogue Repeater Panels

CTPR3000

CF3000PRG

Analogue Sensors

Addressable Beam & Duct Detectors/Callpoints

Addressable Sounders/Beacons

Interfaces

Fan Controller Interface

Interfaces/Ancilliary PCBs

Test Equipment

Fire Detection System Solutions

The Analogue Range

COOPER Safety

CF3000

The Cooper CF3000 range of panels offer a high-specification, analogue fire detection panel solution which is available in a 1, 2 or 4-loop configuration.

It combines sophisticated functionality, yet simple panel operation with a very aesthetically-pleasing design.

The large capacity, ability to support complex cause and effect programming and wide range of user-controllable functions make this panel suitable for a wide range of projects from sheltered housing to large office developments as well as many industrial applications.

The CF3000 range of panels provide a large (120mm x 90mm) touch screen display as the main user element, eliminating the need for dedicated system push buttons. The user interface is menu-driven, automatically reconfiguring to suit the chosen menu option. To enable text updates directly at the panel, the display converts to a full QWERTY keyboard, enabling comprehensive text insertion.

The panel also has 96 zone fire LEDs providing additional information about the extent of any fire activation as well as a comprehensive set of system status LEDs providing additional visual information for the end user.

The panels use 'spur tolerant' soft addressing to minimise installation time and remove the potential for error normally associated with manual addressing.

All of the CF3000 fire detection system components have been specifically designed to operate as part of an integrated system; this provides an assurance that the panel, sensors, interfaces and other ancillaries are all fully compatible with each other and that the full range of system functionality is supported by each device.

714h/01

0832-CPD-1061

Features

> LPCB 3rd party approved to latest:
EN54-2 1997, A1: 2006
EN54-4 1997, A1: 2002 and A2: 2006

> VdS, BOSEC, CNBOP Certified

> Choice of 1, 2 and 4-loop panel options

> Large multi functional touch screen

> Spur tolerant soft addressing

> Short circuit isolators incorporated into each loop device

> Up to 200 addresses per loop

> Fully monitored network capable up to 127 panels

> Network compatible with CF1000 range and CF2000 range of panels

> Optional integral printer

Product Codes

CF30001G	1-Loop panel
CF30002G	2-Loop panel
CF30004G	4-Loop panel
CF30001GP	1-Loop panel c/w integral printer
CF30002GP	2-Loop panel c/w integral printer
CF30004GP	4-Loop panel c/w integral printer
CF30001GNC	1-Loop panel c/w network card
CF30002GNC	2-Loop panel c/w network card
CF30004GNC	4-Loop panel c/w network card
CF30001GPNC	1-Loop panel c/w integral printer, network card
CF30002GPNC	2-Loop panel c/w integral printer, network card
CF30004GPNC	4-Loop panel c/w integral printer, network card

NOTE:
Extended battery versions (EB)

CF3000GM

The Cooper CF3000GM panel offers a high-specification, analogue fire detection panel solution which is available in a 1, 2 or 4-loop configuration.

It combines sophisticated functionality, yet simple panel operation with a very aesthetically-pleasing metal enclosure design.

The large capacity, ability to support complex cause and effect programming and wide range of user-controllable functions make this panel suitable for a wide range of projects from sheltered housing to large office developments as well as many industrial applications.

NEW PRODUCT

R6000

Cooper 19" rack mounted fully modular control panel which consists of a number of different plug in modules, each of which is dedicated to a particular function within the complete Cooper Control Panel.

These modules facilitate the requirements of fire detection, alarm signalling, PA/VA, plant control etc.

Cooper 19" rack mounted control panel has the capability to be networked to other panels, repeaters, mimic panels as well as an alarm manager graphic system, hence provides the perfect solution for all medium to large systems.

This flexible system allows for modules to be added or removed without major modification even after manufacture and commissioning has taken place.

Features

> Capacity for up to 504 loops (up to 64,512 addressable points). This consists of 126 19" rack R6000 fire alarm modules.

> Large versatile touch screen display

> Support complex cause and effect programming

Product Codes

CF30001GM	1-Loop panel
CF30002GM	2-Loop panel
CF30004GM	4-Loop panel
CF30001GMP	1-Loop panel c/w integral printer
CF30002GMP	2-Loop panel c/w integral printer
CF30004GMP	4-Loop panel c/w integral printer
CF30001GMNC	1-Loop panel c/w network card
CF30002GMNC	2-Loop panel c/w network card
CF30004GMNC	4-Loop panel c/w network card
CF30001GMPNC	1-Loop panel c/w integral printer, network card
CF30002GMPNC	2-Loop panel c/w integral printer, network card
CF30004GMPNC	4-Loop panel c/w integral printer, network card

R6000L2	2 loop rack mount fire panel
R6000L4	4 loop rack mount fire panel
R6000L2NC	2 loop rack mount networkable
R6000L4NC	4 loop rack mount networkable
39UECRACK	19" rack, 39 units high
1UPLATE	1 unit blanking plate
2UPLATE	2 unit blanking plate
3UPLATE	3 unit blanking plate
6UPLATE	6 unit blanking plate
ECRACKPACK43	Pack of 4 fixings (1 required per blanking plate)

CF2000

The Cooper CF2000 panel is an entry level two-loop analogue fire detection panel which can be configured for 1 or 2-loop operation.

The panel has a 58mm x 29mm graphic display which provides a simple yet comprehensive, menu-driven, end user interface.

With the panel's ability to support complex cause and effect programming and a wide range of user controllable functions it makes the panel suitable for a varied range of projects from small warehouses to small/medium office developments as well as many small industrial applications.

As with all Cooper analogue addressable panels, the CF2000 uses 'spur tolerant' soft addressing to minimise installation time and remove the potential for errors often associated with many forms of manual addressing.

All of the CF2000 fire detection system components have been specifically designed to operate as part of an integrated system; this provides an assurance that the panel, sensors, interfaces and other ancillaries are all fully compatible with each other and that the full range of system functionality is supported by each device.

714a/02

0832-CPD-1089

Features

> LPCB and BOSEC 3rd party approved to latest:
EN54-2 1997, A1: 2006
EN54-4 1997, A1: 2002 and A2: 2006

> Choice of 1 or 2-loop panel operation

> Menu-driven graphic screen

> Spur tolerant soft addressing

> Short circuit isolators incorporated into each loop device

> Up to 200 addresses per loop

> Network compatible with CF1000 and CF3000 fully monitored up to 127 panels

Product Codes

CF2000G	2-Loop panel
CF2000GNC	2-Loop panel c/w network card

CF1100/CF1200

The Cooper CF1100/CF1200 range of analogue fire detection panels are available as 1 and 2-loop configured panels. They provide sophisticated 'touch screen' functionality yet achieve a simple end user interface operation within a compact panel design.

The CF1100/CF1200 range of panels provide a large (120mm x 90mm) touch screen display as the main user element, eliminating the need for dedicated system push buttons. The user interface is menu-driven, automatically reconfiguring to suit the chosen menu option. To enable text updates directly at the panel, the display converts to a full QWERTY keyboard, enabling comprehensive text insertion.

The panel also has 16 zone fire LEDs providing additional information about the extent of any fire activation as well as a comprehensive set of system status LEDs providing additional visual information for the end user.

The CF1100/CF1200 range supports a complex cause and effect programming ability which, together with a wide range of user controllable functions, makes the panel suitable for a wide range of projects.

As with all Cooper analogue panels the CF1100/CF1200 range uses 'spur tolerant' soft addressing thereby minimising installation time and removing the potential for errors often associated with other forms of system addressing.

As with the entire range of Cooper analogue panels, the CF1100/CF1200 range of panel system components have been specifically designed to operate as part of an integrated system; this provides an assurance that the panel, sensors, interfaces and other ancillaries are all fully compatible with each other and that the full range of system functionality is supported by each device.

Features

> Large versatile touch screen display
> 1 and 2-loop panel versions
> Spur tolerant soft addressing
> Short circuit isolators incorporated into every loop device
> Up to 200 addresses per loop
> Network capable with CF3000 and CF2000 range fully monitored up to 127 panels
> Integral power supply
> Large selection of compatible ancillaries
> Compliant to EN54 parts 2 & 4

Product Codes

CF1100	1-Loop panel
CF1100NC	1-Loop panel c/w network card
CF1200	2-Loop panel
CF1200NC	2-Loop panel c/w network card

CTPR3000

The CTPR3000 fire detection repeater panel provides sophisticated 'touch-screen' functionality yet achieves a simple end-user interface operation within a compact panel design.

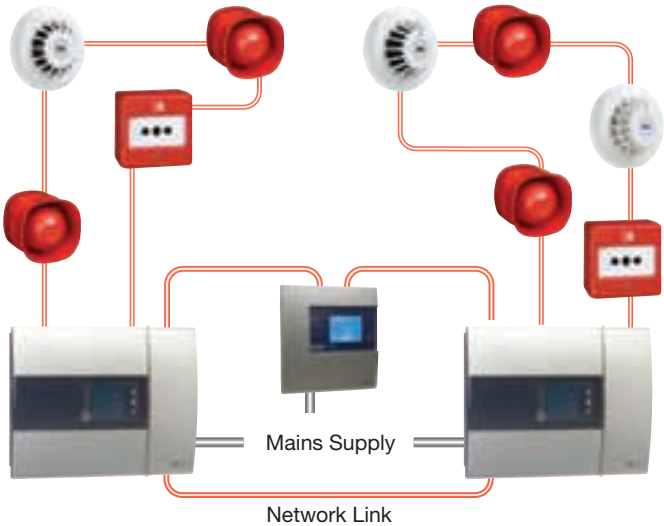
The CTPR3000 is designed to work with Cooper analogue fire alarm control panels as a network repeater. It is fully compliant with the statutory requirement of EN60950 (LVD) and EN50130 (EMC) and includes an integral power supply unit. Compliant with the latest requirements of EN54 pt4 together with a wide range of user controllable functions; make the panel suitable for a wide range of projects.

The Cooper 'touch-screen' repeater panel is easy to install and commission. All text is transmitted via the network and is automatically updated.

Features

> Plug and play. All information is downloaded through the network
> Touch-screen display
> Integrated network capability allows networking with the latest Cooper range of analogue fire alarm control panels
> Multi language capability
> 2 programmable auxiliary relays
> 24 volts 500mA output
> Programmable input
> External printer outputs
> Up to 500 event log
> Optional local and external PSU
> PSU approved to EN54 pt4
> Utilises 2 core cables and up to 126 repeaters can be connected to the network
> Programmable as an active or passive repeater

Network connected



Product Codes

CTPR3000	Touch-screen repeater panel

CF3000PRG

The Cooper analogue system repeater panel is available as a loop-connected panel (CF3000PRG) or as a network-connected panel (CF3000PRGNC).

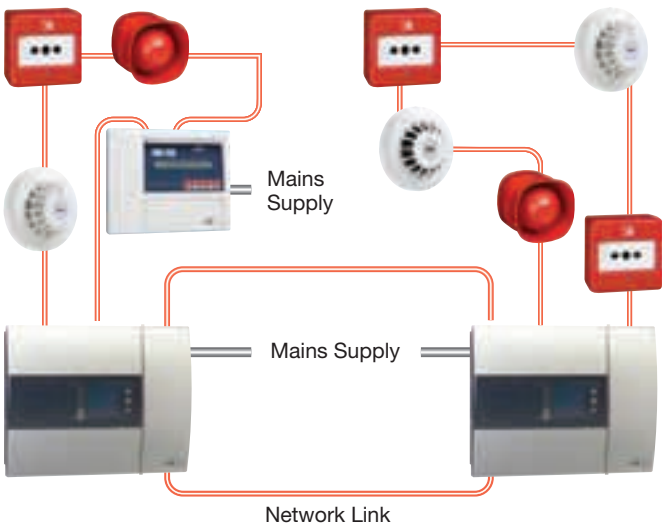
When connected to a panel loop, the host panel text information is downloaded manually at time of system commissioning using 'site installer' software. If the repeater is network connected all text is transmitted via the network and is automatically updated should any changes be made to any of the network panels.

Both repeater panels are fully compatible with the extensive range of Cooper analogue panels.

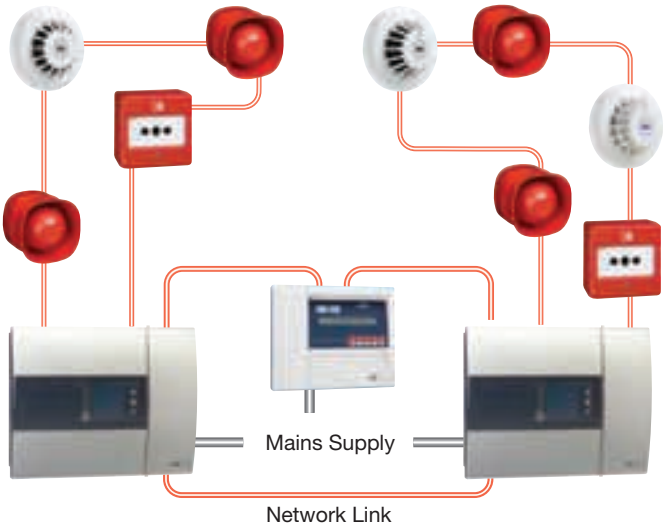
Features

> 2 x 40 character backlit LCD display
> Loop or network options available
> Silence alarm, evacuate and reset commands from repeater

Loop connected



Network connected



Product Codes

CF3000PRG	Loop-connected repeater panel
CF3000PRGNC	Network-connected repeater panel

System configuration

The Cooper analogue control panel system architecture has been designed in such a way that future system expansion, within a single-panel solution or as part of a multi-panel network, can be achieved with a minimum amount of system downtime.

Soft Addressing

The system 'auto learn' facility, once activated on initial panel start up, will scan each loop and allocate an address number to each loop device thus providing a simple yet efficient setup procedure which alleviates the need for time consuming manual device addressing and minimises potential problems due to dual addressing. Each loop device has integral short circuit isolators ensuring maximum loop integrity should a short-circuit fault occur on the loop wiring.

Detection Capacity

Up to 200 addresses per loop can be installed, which can be a mixture of callpoints, sensors, beam detectors, interfaces, loop sounders or repeater panels. It should be noted that, to comply with EN54 requirements no more than 512 addresses should be connected to a single panel.

Alarm Capacity

Up to 60 loop-powered sounders, beacons or sounder beacons can be connected per loop. With a full range of conventional sounders and beacons, up to a total load of 1.5A can be connected via the control panels four alarm line outputs. Alternatively additional conventional sounders can be connected via a CSC354 loop mounted 4-way sounder controller unit remotely from the panel.

Interfaces

An extensive range of interfaces are available for the Cooper range of analogue panels providing solutions for most design requirements.

> Spur isolator available to allow loop spurs of analogue devices

> 3-way 24V rated input / output unit suitable for switching low voltage control equipment

> Zone monitor unit, to connect zones of suitable conventional detectors or loop-powered beam detectors

> Mains rated Input / output unit for switching mains operated equipment

> Sounder circuit controller provides four additional, programmable, conventional sounder circuits remote from the main control panel

> Shop unit isolator allows the connection of a conventional detection zone along with two conventional sounder circuits, ideal for linking small self-contained units onto a main addressable panel. The interface requires a 24V dc power supply.

System Networking

The full range of Cooper analogue panels can be networked together. When fitted with a network card, up to 127 panels and repeaters can be networked to form a single co-ordinated system.

With larger networked systems, where long distances are found, it is possible to connect networks using LON boosters, fibre optic interfaces or IP routers.

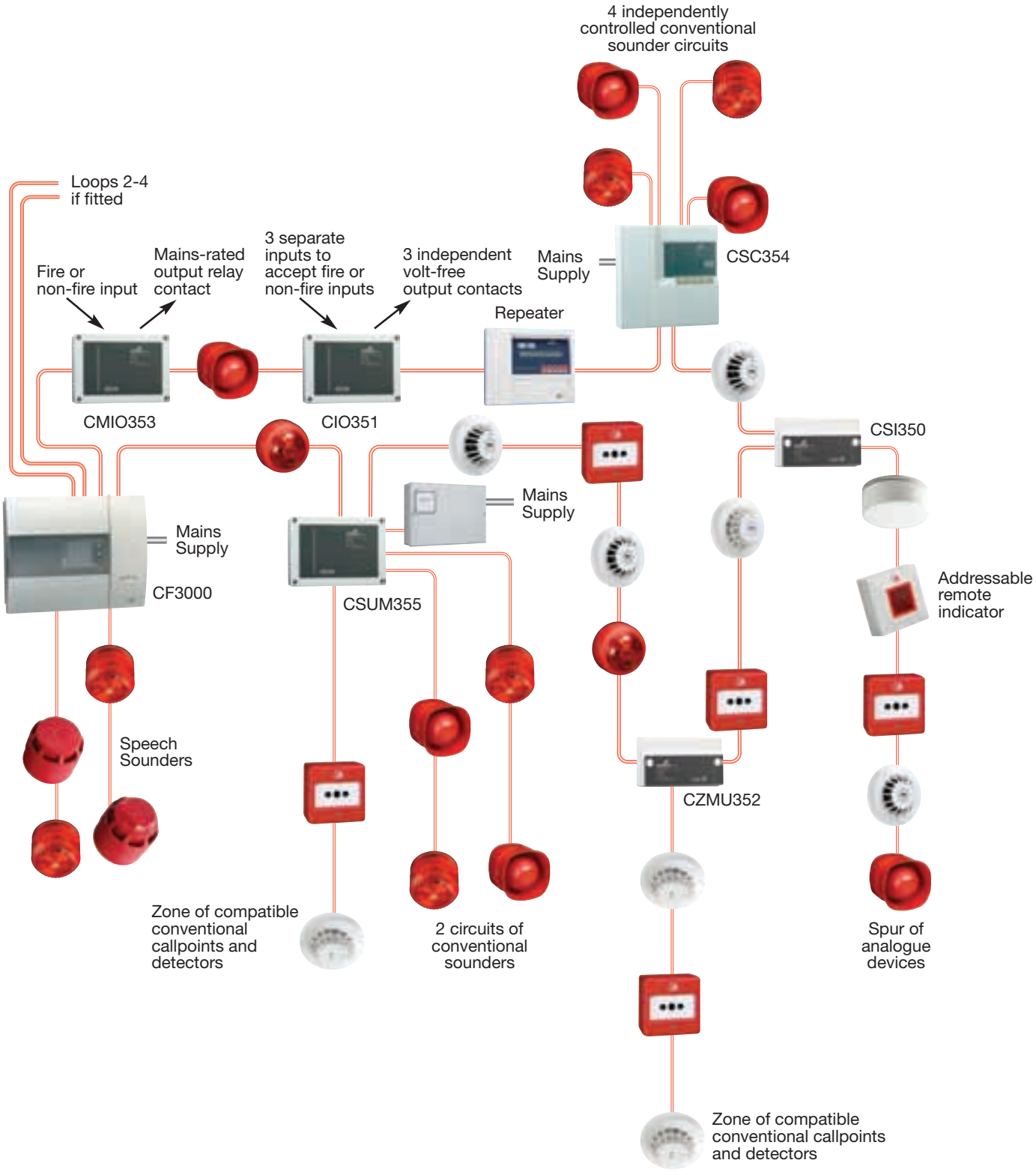
When operating as a network system fire, fault and pre-alarm information is transmitted across the network, as well as text information, with evacuate, silence alarm and reset control functions also permitted across the network. Network configuration of the system, to permit or inhibit each signal or facility, is achieved using the engineering menu on each panel.

Site Monitor/Graphics

Cooper Site Graphic is a versatile alarm management system providing a comprehensive site monitoring and control package of the installed fire detection system that interfaces to the network of the Cooper range of analogue panels using a network manager driver program. The site graphics dedicated PC is connected to the network via an EC0232 interface.

COOPER Safety

Typical application schematic



Analogue panels - specification

Technical Specifications

Panel type	CF3000	CF2000	CF1100	CF1200
Standards	EN54-2 1997, A1: 2006 EN54-4 1997, A1: 2002 & A2: 2006			
Number of loops	CF30001 – 1 loop CF30002 – 2 loops CF30004 – 4 loops	2	1	2
Addresses per loop	200			
Panel sounder circuits	4 outputs (programmed in pairs - outputs 1&2, 3&4)		2	
Class change facility	Operated by external, normally open, volt free contacts			
Auxiliary relay	One set of change over contacts, operated in the event of fire activation			
Auxiliary fire routing equipment output	Monitored 24V dc, 30 mA (max)			
Auxiliary fire protection equipment output	Monitored 24V dc, 30 mA (max)			
Auxiliary fault routing equipment output	Monitored 12V dc, 30 mA (max)			
Output ports	RS485 and RS232 (for connection of repeaters etc)			
Mains input voltage	230V ac +10% / -15%			
System operating voltage	24V dc			
Batteries	2 x 12V 12Ah	2 x 12V 7Ah	2 x 12V 7Ah	
Extended battery option	4 x 12V 12Ah			
Standby duration	24 hours (dependant on loop loading)			
Cable entries	31 top entry cable knockouts (20mm) & 12 rear cable entry cable knockouts (20mm)	20 top entry cable knockouts (20mm) & 7 rear cable entry cable knockouts (20mm)	11 top entry cable knockouts (20mm) plus rear entry cable aperture	
Environmental rating	IP30, -5ºC to +40ºC, 75% RH (non condensing)			
Colour	Graphite			
Size WxHxD (mm)	395x495x125	400x320x170	375x357x50	
Weight	18kg	15kg	8kg	
EB Size WxHxD (mm)	395x495x225			
EB Weight	27kg			

Repeater Panel

Panel type	CTPR3000 Touch-screen repeater	CF3000PRG and CF3000PRGNC
Display	120mm x 90mm touch-screen display	2x40 Character Backlit LCD
System indicators	Power on, fire, fault, test, disable and scroll	Power on, fire, fault, test, disable and scroll
System controls	Silence alarms, evacuate and reset	Silence alarms, evacuate and reset
Input ports	RS232 (for connection of programmer)	RS232 (for connection of programmer)
Mains input voltage	230V ac +10% / -15%	230V ac +10% / -15%
System operating voltage	24V dc	24V dc
Battery	2 x 12V 7Ah	1 x 12V 3.2Ah
Standby duration	24 hours (dependant on loop loading)	24 hours (dependant on loop loading)
Mechanical	PC/ABS, rating - UL94V0	PC/ABS, rating - UL94V0
Environmental rating	IP30, -5ºC to +40ºC, 75% RH (non condensing)	IP30, 0ºC to 25ºC, 75% RH (non condensing)
Colour	Graphite	Light grey
Size WxHxD (mm)	375x357x50	332x270x92
Weight	8kg	3.6kg
Compatibility	CF3000, CF2000, CF1100 and CF1200	CF3000, CF2000, CF1100 and CF1200

COOPER Safety

300 Range

A comprehensive range of analogue sensors are available to operate with the Cooper analogue panel range with the following :-

Features

> Built-in short circuit isolators
> Stylish low profile design
> 360° viewable LED design
> Removable detector chamber
> Drift compensation

CPD APPROVED PRODUCT

LPCB

CAP320 – Photoelectric smoke sensor

CAPT340 – Photo-thermal smoke sensor

CAH330 – Multi-mode heat sensor

CAB300 Common base

CIR301 – Conventional Remote indicator

MRIAD – Addressable remote indicator

Technical Specifications

Model	CAP320	CAPT340	CAH330
Standards	EN54 pt7:2000 + A1:2002	EN54 pt7:2000 + A1:2002 EN54 pt5:2000 + A1:2002	EN54 pt5:2000 + A1:2002
Area coverage	100m² (subject to local standard)		50m² (subject to local standard)
System wiring	Min. 1.5mm, 2 core loop or spur		
Indication	360° visibility light pipe		
Mounting	Surface mount CAB300 base		
Compatibility	CF range of analogue panels		
Addressing mode	Auto address		
Operating voltage	18 to 30V dc		
Max standby current	220µA		
Max alarm current	5mA		
Heat class			
Rate of rise	NA	A1S	A1R
Fixed 77°C	NA	NA	BS
Fixed 90°C	NA	NA	CS
Alarm temperature (static)			
AIR	NA	60°C	60°C
BS	NA	NA	77°C
CS	NA	NA	90°C
Environmental			
Application	Indoor use IP 40		
Temperature	-20°C to 60°C	-20°C to 50°C	-20°C to 60°C
Humidity	0 to 95% non condensing		
Construction			
Material	PC/ABS		
Colour	White		
Dimensions			
(excl. Base) (mm)	101 (Dia) x 33 (H)	101 (Dia) x 43 (H)	101 (Dia) x 43 (H)
(incl. Base) (mm)	104 (Dia) x 45 (H)	104 (Dia) x 55 (H)	104 (Dia) x 55 (H)
Weight	76g (without base)		

Product Codes

		CPD Approved Product
CAP320	Optical sensor	0832CPD0177
CAPT340	Photo thermal 'Dual' sensor	0832CPD0175
CAH330	Heat sensor	0832CPD0174
CAB300	Analogue sensor base	
CIR301	Conventional remote indicator	
MRIAD	Addressable remote indicator	

Beam detection

The Cooper loop powered reflective beam detectors are specifically designed to function with all Cooper analogue panels.

Two versions are available, one with a range of up to 50 Metres, the other with a range of 50 - 100 Metres. The units are extremely simple to install and require no separate power supply.

MAB50R

Duct probe

The Duct Probe unit is designed for use with the Cooper range of optical smoke detectors.

The presence of smoke in a ventilation duct is detected by sampling the airflow through the duct via two sampling tubes. A detector and base are mounted within the sampling chamber, which is located on the external skin of the duct, with sample and exhaust probes passing into the duct in an area of low turbulence. The unit requires a analogue optical detector and base and is supplied with full fixing instructions.

MDP201

CBG Range

The Cooper range of addressable callpoints are available as surface and weatherproof versions and approved to EN54-13.

All callpoints have integral short circuit isolators and have a status LED fitted as standard. To simplify replacement of glass element callpoints are fitted with fast fit clip on front covers.

CBG370S
Surface

CBG370WP
Weatherproof

Technical Specifications

Model	CBG370S	CBG370WP
CPD Approval	0832CPD0575	0832CPD0746
Type	Surface	Weatherproof
Configuration	Addressable	
Rating	24V dc	
Connections	4-way terminal block	
Operating method	Glass element with plastic safety film or resetable plastic element with integral alarm indicator	
Test/reset facility	Unique key	
Construction	ABS	
Colour	Red to EN54-11	
IP rating	IP42	IP67
Temp. range	-10°C to +55°C	
Dimensions HxWxD (mm)	87x87x53	110x110x65
Weight	0.2kg	0.3kg

Product Codes

CBG370S	Callpoint-surface
CBG370WP	Callpoint-weather resistant
CXPC	Polycarbonate cover (pk of 10)
UBSG	Spare glass (pk of 5)
MAB50R	Reflective beam detector (5-50 metre range)
MAB100R	Reflective beam detector (50-100 metre range)
MDP201	Duct mounting probe

CAS Range

Base sounder

CAS380

The CAS380 is a loop-powered integrated sounder and sensor mounting base.

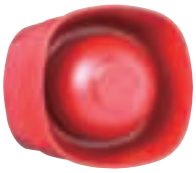
It can be used with any analogue sensor or as a standalone sounder with the optional CASC cover plate. Approved to EN54-3.

Wall sounder

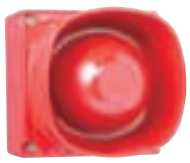
CPD APPROVED PRODUCT

The CAS381 range of loop-powered addressable wall sounders offers a highly efficient, low current sounder option.

Sounder volume and tone are set at the analogue panel avoiding the need to access each sounder individually to alter settings.



CAS381
Wall sounder



CAS381WP
Wall sounder IP65

Integrated sounder beacons

The CASB range of loop-powered addressable wall sounder beacons offer a highly efficient, low current sounder beacon option.

Sounder volume and tone are set at the analogue panel avoiding the need to access each sounder individually to alter settings.

CASBB384
Sounder beacon base

CASB383
Sounder beacon

CASB383WP
IP65 version

LED beacon

The CAS382 loop-powered addressable beacon offers high efficiency LED technology together with a low profile design for a discreet installation.

The beacon is designed to provide a visual indication in areas of high ambient noise or where people may be hard of hearing.

CAB382 LED beacon

Product Codes

CAS380	Base sounder
CAS381	Wall sounder
CAS381WP	Wall sounder - weatherproof
CASC	Pk of 5 base sounder covers
CASBB384	Base sounder beacon
CASB383	Wall sounder beacon
CASB383-WP	Wall sounder beacon - weatherproof
CASC	Pk of 5 base sounder beacon covers
CAB382	LED beacon

Interfaces

Standard

CSI350
Spur Isolator unit

CIO351
3 Channel I/O unit

CZMU352
Zone monitor unit

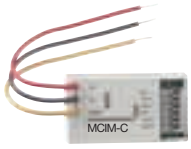
CMIO353
230V Relay I/O unit

CSC354
4 Way sounder controller

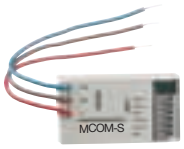
CSUM355
Shop unit monitor

Micro

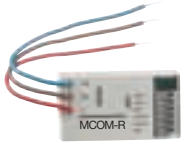
MIU872
Mini-zone monitor



MCIM-C
Single input module



MCOM-S
Single output module



MCOM-R
Single channel output relay module

MICM-NF
Non-fire input module

An extensive range of interfaces are available for the Cooper range of analogue panels providing solutions for most design requirements.

> CSI350 spur isolator available to allow loop spurs of analogue addressable devices

> CIO351 3-channel 24V-rated input / output unit suitable for switching low voltage control equipment

> CZMU352 zone monitor unit, to connect zones of suitable conventional detectors or loop powered beam detectors

> CMIO353 mains-rated input / output unit for switching mains operated equipment

> CSC354 Sounder circuit controller provides four additional, programmable, conventional sounder circuits remote from the main control panel

> CSUM355 shop unit isolator allows the connection of a conventional detection zone along with two conventional sounder circuits, ideal for linking small self contained units onto a main addressable panel. The interface requires a 24V dc power supply

A range of micro interfaces modules are also available:

> MIU872 is a compact single zone input, soft addressed, micro interface, incorporating integral short circuit isolators. It is fully compatible with the current range of Cooper analogue fire detection panels. It is suitable for interfacing a zone of up to 20 conventional Cooper detectors onto a Cooper analogue fire panel. It will operate with any Cooper conventional detector in configuration with a schottky diode type base.

> MCIM-C is a compact input module used to accept input signals from external equipment such as beam detectors, flow switches, valve monitor switches etc.

> MCOM-S is a compact single Channel output unit. This device is identified as a sounder output by a Cooper addressable panel. The maximum number of sounder devices per loop is 60.

> MCOM-R is a compact output module used to control or signal external equipment which require removal of power for reset purposes.

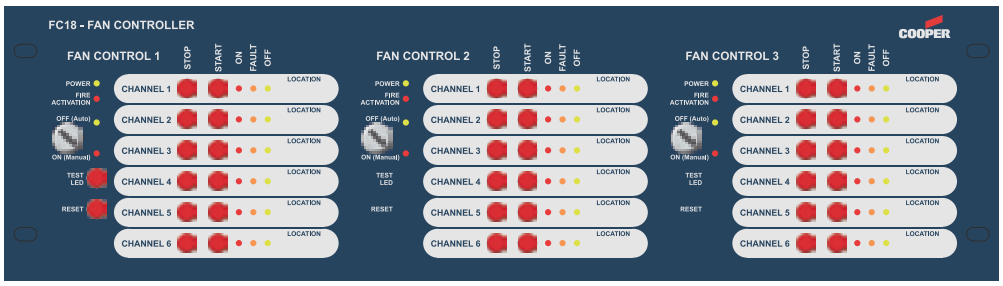
> MICM-NF is a compact single Channel input unit. This device is identified as a non-fire input module by the COOPER addressable panel. The maximum number of addressable MICM-NF per loop is 200. Complex cause and effect can still be achieved using the latest site installer software without any indication on the panel. However the action will still be seen in the event log. Ideally suited for non fire applications.

Product Codes

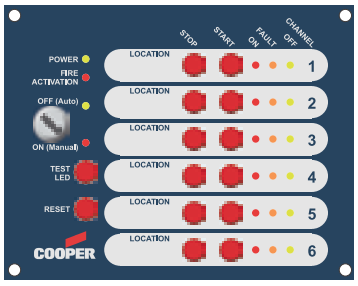
CSI350	Spur Isolator unit
CIO351	3 Channel I/O unit
CZMU352	Zone monitor unit
CMIO353	230V Relay I/O unit
CSC354	4 Way sounder controller
CSUM355	Shop unit monitor
MIU872	Mini-zone monitor
MCIM-C	Single input module
MCOM-S	Single output module
MCOM-R	Single channel output relay module
MICM-NF	Non-fire input module
MCIM	Input module
MCOM	Output module

Fan controller interfaces

FC18



FC6

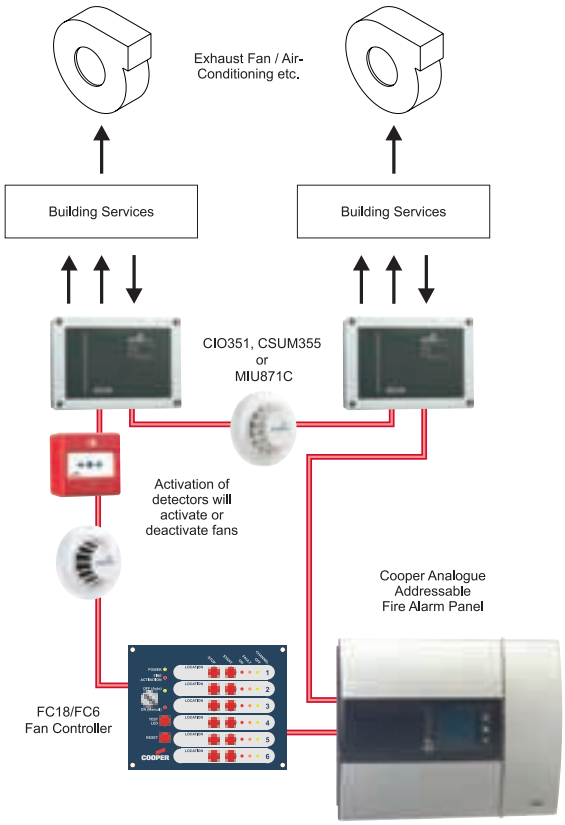


FC18 and FC6 Interface is designed to work with the Cooper CF range of analogue fire alarm control panels, providing the capability to control and display the status of AHU fans.

FC18 and FC6 Interface is connected to a Cooper analogue addressable fire alarm control panel by means of the comms loop, utilizing only one address whilst providing the ability to monitor and control up to six AHU Fans.

Each FC6 and FC18 Interface incorporates its own CPU specifically configured to control the relevant input and output logic making programming quick and easy via the Cooper 'CAPPER' software or site installer.

Using the CAPPER software or site installer, each individual Fan Control channel on the FC6 is programmed to an output and feedback input field device to control and monitor the status of an AHU fan.


Exhaust Fan / Air-Conditioning etc.
Building Services
Building Services
CIO351, CSUM355 or MIU871C
Activation of detectors will activate or deactivate fans
Cooper Analogue Addressable Fire Alarm Panel
FC18/FC6 Fan Controller

Features

> Convenient loop mounting
> Comprehensive LED display
> Surface/rack mounting options
> Key operated auto/manual operation
> Comprehensive software cause and effect

Technical Specifications

	Minimum	Nominal	Maximum
Quiescent Current	-	310µA	-
Environmental Operating Temp	-100°C	-	+600°C
Humidity (non-condensing)	-	-	95%rh
External 24V Supply	18V	24V	28V
External Current	-	-	150mA
Compatibility	Cooper Analogue Fire Systems		

Product Codes

FC6	6 way fan controller - surface mount
FC18	18 way fan controller - 19" rack mount

Interfaces/Ancilliary PCBs

4 to 20mA Interface

> Addressable interface with built-in isolator
> Ideal interface for gas detectors
> Uses one address
> Program levels of sensitivity using dip switch
> 3 volt free outputs for each of the three alarm levels (optional)
> Tracking/enabling facility (in tracking mode CF3000 will display pre-alarm 1, pre-alarm 2 & alarm). In alarm condition, CF cause & effect programming is enabled
> Requires external power supply (PSU is opto isolated from CF3000 loop)
> The supply to the gas detector is taken directly from the interface

4 to 20mA Interface

4 to 20mA Interface with relay outputs

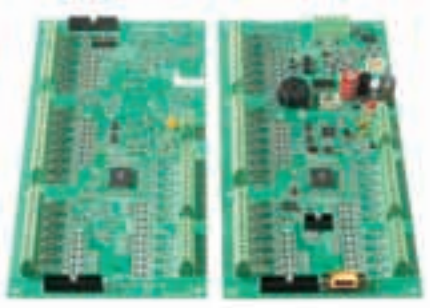
Mimic PCB

> Available as master or slave. Each has 32 outputs
> 96 outputs (1 master + 2 slaves)
> Ideal for mimic panel provision
> Two types available:- LED or relay output
> Each output can be programmed as fire or fault
> Each output can be operated by address, zone or panel activation

Master and slave relay output PCB

LED Repeater PCB

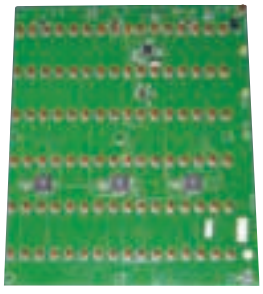
> Can be loop connected or network connected
> Each LED can be programmed to operate by zone or by address for fire or fault indication using PC repeater download software
> Up to 5 different zones can be programmed per LED
> General fire, fault, local power fault & system fault LED provision
> Test lamp button



Master and slave LED output PCB

Loop splitter unit

> Unit is loop connected
> Splits each connected loop into 4 smaller loops (max 50 devices per loop)



96 zone LED repeater PCB

Product Codes

CGI420	4 - 20mA interface
CGI420R	4 - 20mA interface with relay output
ZPCB2252-MMR	Master relay output PCB
ZPCB2252-MSR	Slave relay output PCB
ZPCB2252-MML	LED master output PCB
ZPCB2252-MSL	LED slave output PCB
ZPCB2232-P	96 zone LED repeater PCB
ZPCB2222	Loop splitter unit

Loop splitter PCB

LP800 Loop tester

The LP800 loop tester is a hardware /software combination that can be used to test, commission and fault find a loop of up to 200 Cooper analogue devices (detectors, sounders, ancillary devices) without having to connect the loop to the Cooper analogue Fire Panel.

The loop tester is connected between the loop and PC. It allows the engineer to quickly identify and locate any loop device that is operating outside its operating conditions by varying the alarm threshold of any loop device (Alarm, Pre-alarm and fault).

Features

> Pre-addressing: Identifies all Cooper field devices and determines their address and device type
> Analogue Values: Constantly displays in real time the analogue value of all cooper loop devices in order to determine their status
> Test Led: This command operates the LED of any inputs (detector/call points) as well as controls the outputs of sounders and output modules
> Device Settings: Analogue values of all devices can be interpreted according to ranges which can be set and altered by the user (OK, Pre-alarm, Fire)
> Event Log: A history of events can be stored from the date the application was started
> Soft addressing: Automatically assigns a new, and potentially different, address to every device found on the loop
> Powered from 230 Volts main supply
> Support up to 2km of cable including spurs

The loop tester hardware requires a free serial port on the PC, either internal or via a USB extension, a mains power supply and a direct connection to the device loop.

CF800 Programmer

The CF800 programmer is a versatile tool to aid the installation, commissioning, maintenance and servicing of Cooper addressable devices and fire alarm systems. Cooper CF800 hand held programmer is designed for use with all Cooper addressable series 800 devices.

This unit is light, robust and easy to operate using a user friendly menu structure on 2 x 40 character LCD display. It is powered from a single PP3 size, heavy duty battery or an external 9 -15 volt supply.

The Programmer has a built in Cooper addressable base as well as two external loop terminals for use with all other Cooper ancillary devices.

Features

> Reads addresses
> Writes addresses
> Reads analogue values
> Tests devices
> Deletes addresses
> Programmes the 3 heat settings (rate of rise, 77°, 92°)

Product Codes

LP800KIT	Loop tester
CF800PROG	Programmer

CW9000
dressable Wireless Fire Alarm Control Panel
igned to BS EN54-2:1998 &

2

Products:

Analogue Radio Fire Panel
CW9000
Booster Panel
CWB9500
Interface
CWIF930
Ancillaries
Sensors
Manual Call Point
Open Area Sounder & Beacon

For both business and leisure radio technology is now common place. Such are the advances made in wireless technologies in recent years that most people use wireless devices without a second thought.

Fire Detection System Solutions

Radio Fire Detection

COOPER Safety

Using a new secure wireless system CW9000 provides a comprehensive fire detection system using the new range of field devices and radio control panel from Cooper Safety.

Based on well proven components the sensors, sounders, beacons and call points give CW9000 a highly reliable foundation into which the wireless technology has been integrated to provide a fully featured analogue fire detection and alarm system.

The development of CW9000 has tracked the progress of the European standard EN54-25 “Fire detection and fire alarm systems. Components using radio links”, and has therefore been designed to conform fully with all aspects of this document.

System benefits

Wireless technology offers unique advantages when compared to the installation of wired detection and alarm systems:

Fast and simple installation

Requiring only limited cabling, installation time is greatly reduced. CW9000 is ideally suited to situations where there are limited time periods for work to be undertaken, such as in educational, healthcare and retail establishments.

Reduced disruption

The lack of cables also means that there is little damage to the fabric of the building, especially important in heritage sites or prestigious areas.

Apart from precious décor, the lack of invasion into the structure reduces mess and the risk that dust and rubble will enter vital areas which is particularly important in sterile and food preparation areas and other places where cleanliness is paramount.

Flexibility

Changes to the configuration of a building and reconfiguration of the system can be accommodated both quickly and simply, minimising downtime and essential for rapid refits.

For temporary installations or situations such as small retail outlets where occupation can change frequently the lack of cables means that an optimum system configuration can be maintained without major system reworking.

Cost saving

As devices only have to be fixed to the building, there is no need to run fire resistant cable, trunking, conduit or concealed cables, saving in both materials and labour. The use of multifunction components, such as the integrated AV sounder beacon means there are fewer points to install leading to further economies in the installation process.

The unique survey and commissioning tool has been designed to allow these critical functions to be performed by a single person, again saving effort on site and reducing cost. A further consideration is the cost of the batteries used in the system, by standardising on easily available off the shelf batteries, and ultra-low power consumption to extend operational life and minimise system running costs.

Features

> Meets the requirements of EN54-25
> Addressable 250 device system
> Range greater than 1km in free air
> Low profile aesthetics
> European tones, fully synchronised
> Dual anti-tamper function
> Peripherals use standard AA cells

Applications

> **Fast installation requirement:**
Time limited situations – schools, hospitals
> **Heritage:**
Limited disturbance to priceless décor, no go areas for cabling
> **Temporary systems:**
Building sites, site-cabins, temporary structures
> **Frequent reconfiguration:**
Flexible offices, small shops, display areas
> **Difficult cable routes:**
Areas with difficult or limited access, or where disruption is unacceptable

CW9000

For both business and leisure radio technology is now common place. Such are the advances made in wireless technologies in recent years that most people use wireless devices without a second thought.

Using the new Cooper wireless protocol the CW9000 provides a fire detection system using secure wireless connections between the field devices and the control panels.

Based on well proven components the sensors, sounders, beacons and call points give CW9000 a highly reliable foundation into which the wireless technology has been integrated to provide a fully featured analogue addressable fire detection and alarm system.

The development of CW9000 has tracked the progress of the European standard EN54-25 *"Fire detection and fire alarm systems. Components using radio links"*, and has therefore been designed to conform fully with all aspects of this document.

Features

> Addressable 250 device system
> Range greater than 1km in free air
> Low profile aesthetics
> Touch screen technology
> Soft addressing
> Meets the requirements of EN54-25

Survey Kit

A radio survey is the key to correct and trouble-free operation of any wireless fire detection system.

The CW500 survey kit is supplied in a handy carrying case and operates both as an initial survey instrument and then as a commissioning tool once the equipment has been installed.

Technical Specifications

Power	
Mains fuse	1.6A Slow blow
Nominal voltage	230V ac +10%/-15%
Nominal current	75mA
Batteries	
Number	2
Manufacturer	Yuasa, YSP12-7
Capacity	7Ah
Battery fuse (F4)	4A Quick blow
Maximum battery current	3.5A
Standby current (mA)	100 (1 loop)
Wireless Capacity	
Maximum wireless loops	1
Address capacity	250 Devices
Wireless Inputs	
Maximum wireless inputs	250 Devices
Wireless Outputs	
Maximum wireless outputs	100 Devices

Conventional Sounder Ccts	
Number	2
Total load	1.5A
Fuses (F1,F2)	1.6A Quick blow
End of line resistor	6K8
Auxiliary Relay (not monitored)	
Maximum load	24V dc, 1A
Fuse (PTC4)	1.35A Polyswitch
Mechanical Specification	
Weight (incl. batteries)	9kg
Weight (excl. batteries)	4kg
Dimensions (mm)	357(L)x375(H)x95(D)
Material (backbox)	Mild steel (powder coated)
Material (fascia)	PC/ABS
Flammability rating	UL 94 V0
Cable knockouts	11x20mm

CWB9500

Cooper RF booster allows devices outside the range of the CW9000 wireless Fire Alarm Control panel to be addressed, monitored and controlled by the panel.

Each RF booster operates its own dedicated wireless loop on a different system ID and frequency from the main control panel. The wireless loop of the RF booster, with up to 28 addressable wireless devices, is operated in synchronisation with the CW9000 wireless loop to provide a transparent link between the control panel and the addressable devices.

The addressable devices on the RF Boosters wireless loop are commissioned and directly accessed by the main control panel. Up to 8 Boosters can be commissioned onto the main panel wireless loop.

Features

> Fully addressable
> Duplex technology (2 way communication)
> Mains powered and battery backed
> Power supply designed to comply with EN54 Pt4
> Distance exceeds >1km in free space
> Up to 8 Boosters on the wireless Loop
> Up to 28 wireless devices per Booster

CWIF930

Cooper wireless 3 channel addressable input/output module, provides the facility to monitor 3 independent inputs for fault and fire as well as providing the facility to operate 3 independent volt free contacts for operating devices such as magnetic door holders.

This unit is fully monitored and controlled by the Cooper CW9000 wireless Fire Alarm control panel. It is fully programmable using the sophisticated and powerful Cooper cause and effect programming.

Features

> Fully addressable
> Duplex technology (2 way communication)
> 3 volt free outputs
> 3 monitored hardwired inputs
> Distance exceeds >1km in free space
> Long battery life
> Rear Tamper Protection

Product Codes

CW9000	Analogue addressable radio control panel
CWB9500	Booster panel
CWIF930	3 Channel I/O
CW500	Survey kit
CWB9500	Booster panel

Sensors

The CWD range of sensors are based on multi-sensor technologies using combinations of optical smoke detection and both fixed temperature and rate of rise heat detection.

These elements can be selected to provide optimum detection of all types of fire and operating conditions.

CWD910

CWDB920

Features

CWD910 Sensor Range

> Multi-sensor technology combining optical smoke detection and configurable heat detection (fixed, r-o-r & high temperature)
> Tamper alarm
> First fix base
> Concealed antennas

CWDB920 Sensor AV unit as CWD910 Sensor integrated with:

> Highly visible led alarm beacon
> Alarm sounder
> 4 volume settings
> 8 tones

Manual callpoint

The CWC950 Manual Callpoint shares all the features of the Cooper Addressable Callpoints on which they are based, in addition a tamper switch is provided so that an alarm is transmitted to the CW9000 Control Panel if the callpoint is dismantled or removed.

CWC950

Features

> Reassurance led
> Glass or plastic resettable element (both provided)
> Tamper alarm
> Concealed antennas

Open area sounder & beacon

The CWSB980 Sounder / Beacon is based on the Cooper AV unit to provide a combined audible and visual alarm to suit applications affected by the Disabilities Discrimination Act.

CWSB980

Features

> 100db(A) sounder
> Integrated highly efficient led beacon
> Tamper alarm
> 4 volume settings
> 8 tones

Product Codes

CWD910	Analogue addressable radio multi sensor
CWD920	Analogue addressable radio multi sensor/sounder/beacon
CWC950	Radio callpoint
CWSB980	Radio wall mounted sounder/beacon

Fire

3

Products:

Rack Mounted PA/VA

CFDCA4

CFPER4

CFP24/48

Stand Alone Unit

CFDAU30

Representing the cutting edge of audio technology, Cooper voice alarm systems provide the highest quality audio equipment using the latest digital techniques for greater reliability, ease of operation and simplicity of configuration.

Fire Detection System Solutions

Public Address/Voice Alarm

COOPER Safety

Under BS5588, voice alarm systems are recommended for all public buildings and multi story buildings over four floors. Voice Alarm (VA) systems are the quickest way to evacuate the public & staff from a building.

Following fire detection, automated messages control the flow of people in stair wells and corridors allowing an orderly evacuation without panic. These messages are supplemented by spoken messages from the fire service or management suite confirming the validity and need to leave the building. This positive confirmation speeds evacuation and avoids the "false alarm" mentality reducing the risk of death from fire.

Voice alarm systems

CFDCA4 - Voice Alarm Controller

For most installations, this fixed-function networked voice alarm controller provides the ideal solution.

Features

> Meets the requirements of EN54-16, BS5839pt8:2008
> Four local zones, networkable to eighty
> Six sounder circuit inputs plus reset
> Simplified rack cable management
> 99 entry event log
> PA and Background music functions integrated
> Six high quality messages available
> 64 Network 'Virtual Contacts'
> Comprehensive Service and Engineering functions
> Touch Screen front end available

CFPER4 - Voice Alarm Amplifier

The CFPER4 amplifier is designed to provide the power amplification needed by Voice Alarm systems of all sizes, by using the latest class D techniques the amplifiers are both smaller in size and run cooler than their conventional equivalents.

Features

> Meets or exceeds EN54-16, BS5839pt8:2008
> Two independent 200W Class D amplifiers
> Silent dc load monitoring of up to eight spurs
> Simplified rack cable management
> Battery charging and monitoring to EN54-4
> Priority and Page inputs for local systems
> 2u Convection cooled chassis
> Intelligent "Hot Swap" system
> Impedance monitor option
> Auxillary power for matrices

CFP24/48 - Network Desk Microphones

The CFP24 & CFP48 paging panels have been designed to provide a flexible user interface to the Cooper Voice Alarm systems. The panel layout is clean and uncluttered, but contains all the system functions and status indication required by EN54-16 and BS 5839pt8.
A large speak bar is central on the panel and operation is both simple and intuitive.

Features

> Meets the requirements of EN54-16, BS5839pt8:2008
> Expandable up to 24 (CFP24) or 48 (CFP48) selector keys
> 99 Entry Event log
> Complete site fault and status display

Product Codes

CFDCA4	Four zone network voice alarm controller
CFPER4	4 dual 200W PSCPWM class D voice alarm amplifier
CFP24	Network desk microphone - expandable to 24 keys
CFP48	Network desk microphone - expandable to 48 keys

Voice alarm systems

Floor Rack Unit

Our data cabinet range of 19” floor rack range meet the all the requirements of voice alarm installation. They have been designed to enable ease of site assembly and access, safety and security in use, and durability in service.

The cabinets are available in 18u, 27u, 39u, 42u or 45u. They are supplied in a 600mm wide and 800mm deep format as standard, other formats are available to special request.

When you receive your cabinet, all the wiring will be installed, support rails are fitted for heavy items and blank panels fill in unused or ventilation space.

The use of Cat5 patch leads reduces the build labour on all the systems, all power and speaker circuits use industry standard connectors for ease of replacement.

Features

> Enclosed glass front door
> Slam-latch lock
> Lockable rear metal swing door
> Vented top cover
> Four 19” mounting profiles
> Support rails and blank strips
> Four castors

Product Codes

Please see your Cooper distributor.

Voice alarm systems

CFDAU30 - Addressable Voice Alarm System

The CFDAU30 is a new voice alarm system from Cooper Fire, an innovation which combines the Cooper analogue addressable fire detection panel functionality and sophisticated cause and effect programming with the very latest voice alarm address technology.

Up to 20, CFDAU30 can be installed per loop and can be connected to any Cooper addressable fire detection panel. The CFDAU30 has in build short circuit isolators and can be either hard addressed using the Cooper hand held programmer or soft addressed by the Cooper addressable panel.

The CFDAU30 delivers clear, intelligible voice alarm messages too ensure reliable and consistent protection for both life safety and property. (It is well documented that only 13% of people react to bells, whilst 70% react to a voice message).

The CFDAU30 has been developed to replace sounders and speech sounders in many applications where voice alarm would be preferable. The CFDAU30 is a complete VA system in a single, wall mounted box and comes complete with, 3 pre-recorded messages, fire interface, dual 30W monitored amplifiers, power supply, monitored battery charger and inputs for non monitored paging and music.

Features

> BS5839 Part 8 Compliant
> EN60849 Compliant
> Dual 30W 100V line outputs
> Built in short circuit isolator
> 3 messages (65 seconds)
> Soft addressing
> Emergency microphone in fire interface (with reset)
> Common fault out
> Paging input
> Operates on CWZ fire cables
> Full fault monitoring
> Battery maintained
> Network version available

Speaker Monitoring

The speaker circuits are dc monitored for simplicity, allowing speaker circuits to be commissioned using a simple multi-meter. Each speaker requires a blocking capacitor, this is typically 1uF 250Vdc for ceiling speakers and 2.2uF 250Vdc for Horn Speakers.

Messages

All messages are Windows™ WAV files, and are up loaded to the on board Flash memory using a specially developed PC application and a serial port (including USB types).

The unit holds three messages, with a combined playing time of over 65 seconds.

Cables

Cables between the Fire Panel, Emergency Microphone and Speakers must be fire rated for standards compliance.

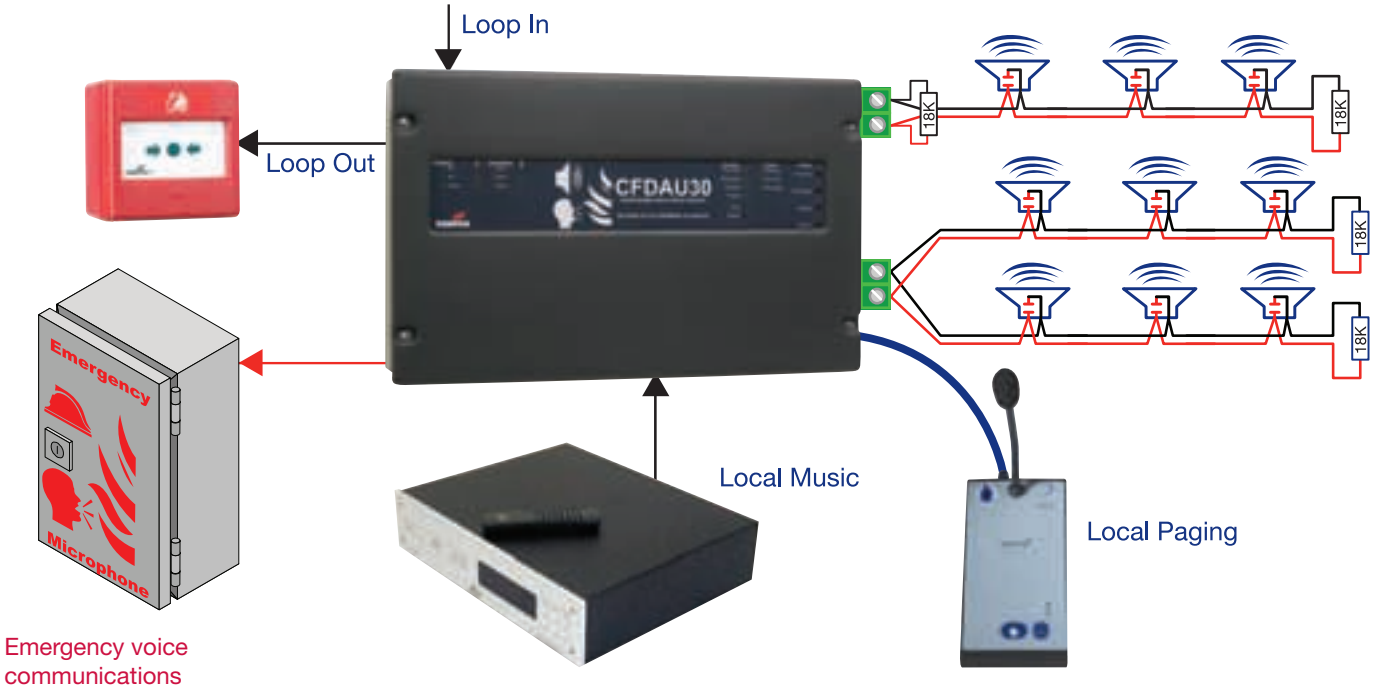
The system is designed to run with all CWZ rated cables including Mineral Insulated types, for maximum run lengths consult the chart.

Each speaker circuit can have up to two spurs as shown below for maximum flexibility.

Product Codes

CFDAU30	Distributed amplifier unit

Typical application schematic



Emergency voice communications (See section 5)

Technical Specifications

Audio Outputs	
Circuits	2 off 30W RMS
Level	100V RMS (+40 dB(A)V)
Bandwidth	80Hz to 18kHz
Monitoring	dc end of line
Fault indication	Open, Short, Earth
Inputs	
BGM	
Sensitivity	-6dB(A)V to +2dB(A)V
Remote Pot Value	10K Ω
PAGE	
Sensitivity	-6dB(A)V to +4dB(A)V
Ptt Type	5V to access
Fire Interface	
Inputs	3 off isolated +12V to +33V (Alert, Evacuate, Reset)
Outputs	1 Relay (open on fault)
Fire Microphone	
Audio Sensitivity	0dB(A)V Balanced
Control Inputs	Monitored triggers (PTT, MSG1, MSG2, CNCL) 5V active.

Power Supply	
Mains	230Vac ±10%
Battery	24V nominal
Charger Type	Constant Voltage
Charge Voltage	27.6V
Charge Current	1.1A
Aux Supply	1A
Quiescent Current	440mA (both Channels active) 60mA (Mains off)
Standards Compliance	
EMC	EN55103-1, EN55103-2
LVD	EN60065
Product Family	EN54-16, EN54-4
Physical	
Height	220mm
Width	430mm
Depth	120mm
Weight	8.5kg
Material	Zintec Painted, ABS lid
Colour	Light Grey/ Dark Grey

Fire

4

Products:

Ceiling Loudspeakers
Cabinet Speakers
Horn Loudspeakers
Projectors/Spheres

The Next Two® range of public address loudspeakers offer many types and configurations to suit the varying acoustic and environmental conditions found in commercial and industrial locations.

Fire Detection System Solutions

Loudspeakers

Whether the call is for discrete ceiling speakers in a hotel or for vandal resistant weatherproof columns on a station, there is a suitable model within the range to match the most demanding environments.

Where the speakers are required to operate in a highly secure life safety Voice Alarm system, as found in many public areas such as airports and retail malls, then versions are available which are fire rated and fully meet the recommendations of BS5839-Pt8.

MC - 4 / 5 / 6 / 8

Ceiling Loudspeakers

Designed to be aesthetically pleasing and acoustically engineered for quality sound reproduction, the MC range of loudspeakers are ideal for general public address, background music and voice evacuation systems.

"FT" versions are supplied with firedomes which are fitted into a ceiling prior to the driver assembly, giving the advantage of hard wiring through 2 x 20mm and 1 x 25mm top gland entries to a terminal block in the firedome. For ease of installation, the units incorporate a user-friendly true first and second fit fixing method and are supplied with a dual 100V/70V line transformer. A convenient plug-in connector is provided for rapid second stage installation.

The MC-FT range is supplied compliant to BS5839, part 8.

Features

> 103 dB(A)
> 10W
> BS5839-8 Compliant versions available
> Mild steel
> 100V/70V line transformer (except MC-4)

Technical Specifications

Model	MC-4	MC-5	MC-6	MC-8
Power	10W/100V line			
Output	100dB(A) @ 10W	103dB(A) @ 10W		
Sensitivity	90dB(A) @ 1W	93dB(A) @ 1W		
Tappings	0.75, 1.5, 3.0, 6.0, 10W			
Frequency range	140-14,000Hz	100-15,000Hz		
Dispersion @ 1kHz	140° Conical	150° Conical	170° Conical	150° Conical
Temperature	- 20°C to + 50°C			
Protection	Interior use			
Ceiling opening	Depends on model (see installation instructions)			
Terminations	Nylon Block			
Mounting	Bracket			
Weight	0.9kg to 1.8kg (dependant on model)			
Material	Steel			
BS5839-8 additions	Steel Firedome, Ceramic terminals, Thermal fuses, High temp. wiring			
Colour	White			

Product Codes

MC-4T	4" speaker, 10W, 100V
MC-4FT	4" speaker, 10W, 100V, Part 8 Compliant
MC-5T	5" speaker, 10W, 100V
MC-5FT	5" speaker, 10W, 100V, Part 8 Compliant
MC-6T	6" speaker, 10W, 100V
MC-6FT	6" speaker, 10W, 100V, Part 8 Compliant
MC-8T	8" speaker, 10W, 100V
MC-8FT	8" speaker, 10W, 100V, Part 8 Compliant

Quickfit

Ceiling Loudspeakers

The Quickfit truly lives up to its name for ease of installation and quick maintenance due to its unique hinge and fixing mechanism. This combined with stylish appearance and quality sound makes it a totally distinctive unit. Manufactured from UL approved fire retardant ABS to yellow card V.O. at 1:6mm this unit can be supplied with or without transformer and firedome. The Quickfit is also available in 8 ohm.

Features

> Up to 101dB(A)

> Easy to install

> 100V line transformer or 8 ohm version available

Technical Specifications

Model	Quickfit
Power	10W (50/100V line)
Output	101dB(A) @ 10W
Sensitivity	91dB(A) @ 1W
Tappings (100V)	0.25, 0.5, 0.75, 1.5, 3.0, 6.0, 10.0W
Frequency range	110-12,000Hz
Dispersion @ 1kHz	160° Conical
Temperature	- 10°C to +50°C
Protection	IP55
Ceiling opening	209mm diameter
Terminations	Nylon block
Mounting	Push clips, hinge
Weight	0.5kg, 0.7kg (with transformer), 0.8kg (with firedome)
Construction	ABS
Colour	White

Product Codes

QUICKFIT-T/8OHM	Ceiling speaker, 10W, 100V/8 ohm
QUICKFIT-FT/8OHM	Ceiling speaker, 10W, 100V/8 ohm, Part 8 Compliant

MA - 4 / 6

Weatherproof Ceiling Loudspeakers

These 4 and 6 Watt compact weatherproof ceiling loudspeakers are constructed from a high grade polymer, with a polypropylene driver unit. Ideal for use in areas of high humidity and marine applications where space is of a premium, the MA's can be supplied with or without a 100 volt line transformer and firedome.

Features

> Up to 100 dB(A)
> 4 and 6W units
> IP55
> High grade polymer
> 100V line transformer or 8 ohm version
> Firedome available

Technical Specifications

Model	MA-4	MA-6
Power	4W (50/100V line)	6W (50/100V line)
Output	92dB(A) @ 4W	100dB(A) @ 6W
Sensitivity	86dB(A) @ 1W	92dB(A) @ 1W
Tappings	0.5, 1.0, 2.0, 4.0W	0.75, 1.5, 3.0, 6.0W
Frequency range	110-14,000Hz	
Dispersion @ 1kHz	150° Conical	160° Conical
Temperature	- 20°C to +50°C	
Protection	IP55	
Ceiling opening	108mm diameter	145mm diameter
Terminations	Spring clamp	
Mounting	4 x M4 Screws	
Weight	0.5kg 0.6kg (with transformer) 0.8kg (with firedome)	0.6kg 0.8kg (with transformer) 1.0kg (with firedome)
Construction	Polymer	
Colour	White	

Product Codes

MA-4	4" ceiling speaker, 4W, 8 ohm
MA-4F	4" ceiling speaker, 4W, 8 ohm, Part 8 Compliant
MA-4T	4" ceiling speaker, 4W, 100V
MA-4FT	4" ceiling speaker, 4W, 100V, Part 8 Compliant
MA-6	6" ceiling speaker, 6W, 8 ohm
MA-6F	6" ceiling speaker, 6W, 8 ohm, Part 8 Compliant
MA-6T	6" ceiling speaker, 6W, 100V
MA-6FT	6" ceiling speaker, 6W, 100V, Part 8 Compliant

Sound 20

Dual Driver Ceiling Loudspeakers

This 20 Watt 100V line (30W 8 ohm) dual driver ceiling speaker is primarily aimed at installations which require excellent music and/or voice reproduction. The Sound 20 is an ideal choice for shopping centres, leisure centres, gymnasiums, hotels and other applications where high performance ceiling speakers are required. This high performance is achieved by use of a mid range driver and tweeter combination connected by a PCB mounted crossover to give a reliable wide range operation.

A BS5839 part 8 compliant version for voice alarm requirements is available and comes complete with thermal fuses, high temperature wiring, ceramic terminal block and steel firedome.

Features

> Up to 102 dB(A)
> Selectable power up to 20W
> BS5839-8 option available
> 100V line transformer or 8 ohm
> Steel construction
> Removable front grill held by ferrite magnets
> Optional colours available upon request

Technical Specifications

Model	Sound-20
Power	30W (8 ohm input), 20W (100V line)
Output	102dB(A) @ 20W
Sensitivity	89dB(A) @ 1W
Frequency range	80-20,000Hz
Dispersion @ 1kHz	160° Conical
Temperature	- 20°C to +55°C
Protection	Interior use
Ceiling opening	235mm diameter
Terminations	Nylon Block, Pt8 Version - Ceramic Block
Mounting	Bracket
Weight	2.7kg
Construction	Steel
BS5839-8 additions	High temperature cable / Thermal fuse
Colour	White

Product Codes

SOUND-20 8OHM	30W high quality speaker, 8 ohm
SOUND-20T	30W high quality speaker, 100V transformer
SOUND-20TPT8	30W high quality speaker, 100V transformer, Part 8 Compliant
SOUND-20T 8OHM PT8	30W high quality speaker, 8 ohm and 100V transformer, Part 8 Compliant

SAFE - V6 / BiDi

Vandal Resistant Loudspeakers

This series of elegant looking robust metal cabinet loudspeakers are vandal resistant and are supplied with a 100 volt line transformer. The units contain 2 x 20mm knock-out gland entries and have a range of fixing holes for easy installation to wall or ceiling.

Recommended for voice evacuation systems, these units are ideally suited for use in shopping centres, prisons, schools, railway stations, etc., and can be supplied in optional colours on request. SAFE-V6 units are supplied with 100V/70V line transformer as standard.

The SAFE Bi-Di is a bi-directional 10 Watt loudspeaker ideal for corridors.

The SAFE range is supplied as standard in compliance with BS5839-8.

Features

> Up to 125 dB(A)
> 10, 15 & 30W horn
> IP66
> Spun aluminium construction
> 100V line transformer

Technical Specifications

Model	V6	BiDi
Power	10W (70/100V line)	10W (100V line)
Output	100dB(A) @ 6W	95dB(A) x 2 @10W
Sensitivity	90dB(A) @1W	85dB(A) x 2 @1W
Tappings	0.25, 0.5, 0.75, 1.5, 3, 6 10W	
Frequency range	110-12,000Hz	12-12,000Hz
Dispersion @ 1kHz	150° Conical	180° Conical
Temperature	- 20°C to +50°C	
Protection	Interior use	
Terminations	Ceramic block	
Cable Entry	2 x 20mm knockouts in top and bottom. Single rear entry	2 x 20mm knockouts in the top. Single rear entry
Mounting	Tilt & turn bracket	
Weight	2.0kg	
Construction	Vandal-proof mild steel	
BS5839-8	Yes	
Colour	White	

Product Codes

SAFE-V4TPT8	Metal cabinet loudspeaker, 6W, 100V transformer, Part 8 Compliant
SAFE-V6TPT8	Metal cabinet loudspeaker, 10W, 100V transformer, Part 8 Compliant
SAFE-V6TVC	Metal cabinet loudspeaker, 10W, 100V transformer, Part 8 Compliant, with volume control
SAFE-Bi-Di 6TPT8	Metal cabinet loudspeaker, 10W, 100V transformer, Part 8 Compliant, bi-directional

SUB - 200 / 500

High Quality Cabinet Loudspeakers

The SUB range of monitor-style loudspeakers provides the installer with a stylish solution to sound reinforcement in a variety of locations. These compact units are both pleasing to the eye and unobtrusive.

The cabinets are manufactured from a structurally-loaded plastic material with excellent acoustic properties. The SUB-200 is fitted with a high quality full-range driver; the SUB-500 is a two-way reflex design with an extended bass response. Both systems are ideal for music reproduction.

These products are available in both 8 ohm and 100 volt line versions and come complete with a swivel mounting and slide bracket. Weatherproof and BS5839 part 8 compliant versions are available. BS5839 part 8 compliant versions can be fitted with fire-rated cable tails on request – contact sales office.

Features

> Up to 105 dB(A)
> Upto 50W
> ABS plastic
> 8 ohm and 100V line versions available
> Available in weatherproof and BS5839-8 compliant options

Technical Specifications

Model	SUB200	SUB500
Power	15W / 100V line, 20W / 8 ohm	30W / 100V line, 50W / 8 ohm
Output	101dB(A) @ 15W	105dB(A) @ 30W
Sensitivity	89dB(A) @ 1W	90dB(A) @ 1W
Tappings (100V)	2, 4, 7.5, 15W	5, 7.5, 15, 30W
Frequency range	100 - 16,000Hz	80 - 20,000Hz
Dispersion @ 1kHz	160° Conical	180° Conical
Temperature	- 10ºC to + 50ºC	
Protection	Interior use (WP Version available)	
Terminations	Spring loaded terminals (Pt8 Version-ceramic blocks)	
Cable entry	20mm cable gland	
Mounting	Keyhole / Swivel & slide bracket	
Weight	1.2kg / 8 ohm, 1.4kg / 100V Line	1.8kg / 8 ohm, 2.3kg / 100V Line
Material	Polypropylene	
BS5839-8	Yes	
Colour	Black or white	

Product Codes

SUB-200T BLACK	Cabinet speaker, 20W, 100V
SUB-200 8OHM	Cabinet speaker, 20W, 8 ohm
SUB-200TPT8	Cabinet speaker, 20W, 100V, Part 8 Compliant
SUB-500T	Cabinet speaker, 50W, 100V
SUB-500 8OHM	Cabinet speaker, 50W, 8 ohm
SUB-500TPT8	Cabinet speaker, 50W, 100V, Part 8 Compliant

CM - 15 / 20 / 40

Weatherproof Column Loudspeakers

The slimline CM range of column speakers has been designed for installation with the kind of appeal normally associated with foreground music. These robust yet attractive loudspeakers are designed to give high quality sound reproduction. Complete with an easily fitted rugged stainless steel swivel bracket arrangement these weatherproof speakers can be used in airports, the rail industry, churches, small theatres and other places of entertainment.

With an ingress protection rating of IP65 and BS5839, part 8 compliant as standard, these units represent an affordable and elegant high quality solution for music and speech reproduction.

Features

> Up to 109 dB(A)
> 15, 20 and 40W units
> BS5839-8 Compliant as standard
> IP65
> Aluminium
> Switchable between 100V line transformer and 8 ohms

Technical Specifications

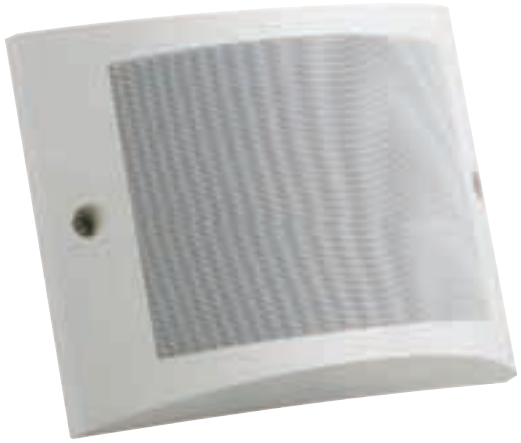
Model	CM-15	CM-20	CM-40
Power	15W - 100V line only	20W - 100V line / 4 ohms	40W - 100V line / 8 ohms
Output	101dB(A) @ 15W	106dB(A) @ 20W	109dB(A) @ 40W
Sensitivity	89dB(A) @ 1W	91dB(A) @ 1W	93dB(A) @ 1W
Tappings (100V)	1.25, 2.5, 5, 10, 15W	1.25, 2.5, 5, 10, 20W	2.5, 5, 10, 20, 40W
Frequency range	150 - 18,000	100 - 20,000	100 - 20,000
Dispersion @ 1kHz	180° Horiz / 70° Vert	180° Horiz / 70° Vert	200° Horiz / 90° Vert
Temperature	- 20°C to + 50°C		
Protection	IP65		
Cable entry Industrial version	1 x M25 entry with conduit adaptor	1 x M25 entry with conduit adaptor Pt8 - 2 x M20 entries with glands	Pt8 - 2 x M20 entries with glands
Mounting	Tilt & turn bracket		
Weight	1.7kg	2.7kg	3.8kg
Material	Aluminium		
BS5839-8	-	Yes	Yes
Colour	White		

Product Codes

CM-15TI	Column speaker, 15W, 100V, plus adaptor, IP65
CM-20T	Column speaker, 20W, 100V, IP65
CM-20TPT8	Column speaker, 20W, 100V, IP65, Part 8 Compliant
CM-40T	Column speaker, 40W, 100V, IP65
CM-40TPT8	Column speaker, 40W, 100V, IP65, Part 8 Compliant

WS - 10T

Wall Cabinet Loudspeakers



Designed to offer a high standard of visual appeal at a competitive price, the WS10 also incorporates significant benefits for the installer. With a separate back box, the wiring can be terminated before fit out. The speaker is fitted with a convenient and quick plug in connector allowing a rapid final fit.

Available as a 10W coaxial unit, with facility for glanded cable entry to allow the IP21 rating to be maintained. A stylish brushed stainless steel bezel is available as an optional extra to further enhance the superb aesthetics.

Features

> 101dB(A)
> 10W with multiple tappings, including a 6W tapping option
> All versions BS55839-8 Compliant
> Coaxial drivers for enhanced performance
> Dual 100V/70V line transformer
> Stylish brushed stainless steel bezel available (supplied separately)

Technical Specifications

Model	WS-10T
Power	10W (70/100V line)
Output	101dB(A) @ 15W
Sensitivity	89dB(A) @ 1W
Tappings (100V)	0.25, 0.5, 0.75, 1.5, 3, 6, 10W
Frequency range	150-20,000Hz
Dispersion @ 1kHz	120° Conical
Temperature	- 10ºC to + 55ºC
Protection	Interior use
Terminations	Ceramic block
Cable entry	20mm cable gland
Mounting	Keyhole / Swivel & slide bracket
Weight	1.2kg (8 ohm)
Material	ABS (Optional - stainless steel bezel)
BS5839-8 additions	Yes
Colour	White

Product Codes

WS-10T	Dual cone speaker, 10W, 70/100V transformer, Part 8 Compliant
WS Bezel	Stainless Steel Bezel

MR - 10 / 15 / 30

Corrosion Free Horn Loudspeaker

This range of lightweight, corrosion-free and weatherproof horn loudspeakers cover the spectrum of sound required for general sound reinforcement.

These highly effective units give clarity of speech and directional sound reproduction and are supplied complete with a stainless steel bracket. The ABS plastic is unaffected by most chemicals.

The units are available with or without transformer and BS5839, part 8 compliant options.

Features

> IP66
> up to 125 dB(A)
> 10, 15 and 30W versions
> Corrosion-free abs plastic
> Stainless steel mounting bracket
> BS5839-8 Compliant versions available

Technical Specifications

Model	MR-10	MR-15	MR-30
Power	10W (100V line)	15W (100V line)	30W (100V line)
Output	115dB(A) @ 10W	119dB(A) @ 15W	125dB(A) @ 30W
Sensitivity	105dB(A) @ 1W	108dB(A) @ 1W	110dB(A) @ 1W
Tappings (100V)	1, 3, 5, 10W (selected by rotary switch)	1, 3, 5, 10, 15W (selected by rotary switch)	1, 3, 5, 10, 15, 30W (selected by rotary switch)
Frequency range	280-12,000Hz (dependant on model)		
Dispersion @ 1kHz	100° - 110° Conical (dependant on model)		
Temperature	20°C to +60°C		
Protection	IP66		
Terminations	500mm Flying lead		
Mounting	Stainless steel "U" Bracket		
Weight	1.1kg - 1.6kg with transformer (dependant on model)		
Construction	ABS		
Material	Aluminium		
BS5839-8	Versions available		
Colour	Light cream		

Product Codes

MR-10T	Horn speaker, 10W, 100V line transformer
MR-15T	Horn speaker, 15W, 100V line transformer
MR-30T	Horn speaker, 30W, 100V line transformer
MR-15 8OHM	Horn speaker, 15W, 8 ohms only*
MR-30 8OHM	Horn speaker, 30W, 8 ohms only*
MR-10TPT8	Horn speaker, 10W, 100V line transformer & BS5839, Part 8 Compliant
MR-15TPT8	Horn speaker, 15W, 100V line transformer & BS5839, Part 8 Compliant
MR-30TPT8	Horn speaker, 30W, 100V line transformer & BS5839, Part 8 Compliant

AR - 10T / 15T / 30T

Horn Loudspeakers

Next Two's metal horn loudspeakers are manufactured in robust spun aluminium and are designed for heavy-duty industrial use. They are coated in a tough, grey epoxy finish. The AR-30 has switchable tappings which allow the installer to adjust sound pressure levels without rewiring.

Suitable for both indoor and outdoor use, these compact re-entrant horns provide high sensitivity combined with a tightly controlled dispersion pattern.

The AR-15 and AR-30 come complete with a 16mm weatherproof gland entry plate. The AR-10 is supplied with a 300mm flying lead.

Features

> Up to 125 dB(A)
> 10, 15 & 30W horn
> IP66
> Spun aluminium construction
> 100V line transformer

Technical Specifications

Model	AR-10T	AR-15T	AR-30T
Power	10W (100V line)	15W (100V line)	30W (100V line)
Output	117dB(A) @10W	120dB(A) @15W	110dB(A) @30W
Sensitivity	107dB(A) @ 1W	109dB(A) @ 1W	110dB(A) @ 1W
Tappings (100V)	2.5, 5.0, 10W	2.0, 4.0, 7.7, 15W	4.0, 7.7, 15, 30W
Frequency range	325-6,000Hz (dependant on model)		
Dispersion @ 1kHz	110° - 120° Conical (dependant on model)		
Temperature	20°C to +60°C		
Protection	IP66		
Terminations	Flying lead	1 x M16 Gland entry	
Mounting	"U" Bracket		
Weight	1.0kg	1.5kg	2.0kg
Construction	ABS		
Material	Aluminium		
Colour	Light grey		

Product Codes

AR-10T	Industrial horn speaker, 10W, 100V, IP66
AR-15T	Industrial horn speaker, 15W, 100V, IP66
AR-30T	Industrial horn speaker, 30W, 100V, IP66

RAC - 15 / PAC - 15

Sound Projectors

These elegant but rugged sound projectors are manufactured in an aluminium extruded case finished in white (RAL 9010). The RAC-15 has a slide fitting mounting bracket whereas the PAC-15 has a fitted U-bracket. Incorporated in these units is a high quality dual cone driver unit giving both clear speech and excellent background music reproduction for many applications both indoors and out. With a rugged construction, these units are ideally suited for use in corridors, passageways, shopping centres, prisons, car parks, railway stations and other public places.

The RAC-15 and PAC-15 are BS5839, part 8 compliant, weatherproof to IP54 and are fitted with a 100V line transformer and a 0.5m fire rated cable tail as standard.

Features

> Up to 104dB(A)
> 15W
> BS5839-8 Compliant
> IP54
> Aluminium housing
> 100V line transformer
> Options available :
- 8 ohms
- Special paint finish

Technical Specifications

Model	PAC - 15FT	RAC - 15FT
Power	15W - 100V line	2 x 7.5W - 100V line
Output	104dB(A) @ 15W	98dB(A) @ 15W
Sensitivity	92dB(A) @ 1W	90dB(A) @ 1W
Tappings (100V)	0.8, 1.3, 2.7, 4, 7.5, 15W	
Frequency range	120 - 20,000Hz	140 - 20,000Hz
Dispersion @ 1kHz	130° Conical	
Temperature	- 40° to + 90°	
Protection	IP54	
Terminations	Flying lead - 0.5m fire rated multicore	
Mounting	"U" Bracket	
Weight	2.4kg	2.6kg
Material	Aluminium	
BS5839-8	Yes	
Colour	White	

Product Codes

RAC-15FT (Industrial)	Bi-directional speaker, 2 x 75W, 100V, Part 8 Compliant, plus adaptor
RAC-15FTPT8	Bi-directional speaker, 2 x 75W, 100V, Part 8 Compliant
PAC-15FT (Industrial)	Projector speaker, 15W, 100V, Part 8 Compliant, plus adaptor
PAC-15FTPT8	Projector speaker, 15W, 100V, Part 8 Compliant

MSP - 20T

Music Projector

20 Watt Music Projectors providing excellent music reproduction as well as clear speech. Ideal for leisure centres, swimming pools, stadiums, etc, as well as for background music applications. Weatherproof. Complete with 100 volt line transformer, 8 ohm version available by request. BS 5839, part 8 compliant version is also available.

Supplied with multicore flying lead and stainless steel bracket.

Features

> Up to 108dB(A)
> 20W
> IP54
> ABS plastic body, painted metal grille
> 100V line transformer or 8 ohm version
> BS5839-8 Compliant option

Technical Specifications

Model	MSP-20T
Power	20W (100V line)
Output	107dB(A) @ 20W
Sensitivity	95dB(A) @ 1W
Tappings (100V)	2.5, 5, 10, 15, 20W
Frequency range	125-20,000Hz
Dispersion @ 1kHz	120° - 150° Conical (dependant on model)
Temperature	- 20°C to +60°C
Protection	IP54
Terminations	Flying lead -1m or 0.5m multicore (dependant on model)
Mounting	Stainless steel "U" bracket
Weight	2.2kg
Construction	ABS
Colour	Cream

Product Codes

MSP-20T	Speaker, 20W, IP54, 100V transformer
MSP-20TPT8	Speaker, 20W, IP54, 100V transformer, Part 8 Compliant

MSP - 30T

Music Projectors

30 Watt Music Projectors providing excellent music reproduction as well as clear speech. Ideal for leisure centres, swimming pools, stadiums, etc, as well as for background music applications. Weatherproof. Complete with 100 volt line transformer, 8 ohm version available by request. BS 5839, part 8 compliant version is also available.

Supplied with multicore flying lead and stainless steel bracket.

Features

> Up to 112dB(A)
> 30W
> IP54
> ABS plastic body, painted metal grille
> 100V line transformer or 8 ohm version
> BS5839-8 Compliant option

Technical Specifications

Model	MSP-30T
Power	30W (100V line)
Output	112dB(A) @ 30W
Sensitivity	97dB(A) @ 1W
Tappings (100V)	100V - 7.5, 15, 30W, 70V - 3.8, 7.5, 15, 30W, 50V - 1.9, 3.8, 7.5, 15, 30W
Frequency range	125-20,000Hz
Dispersion @ 1kHz	120° - 150° Conical (dependant on model)
Temperature	- 20°C to +60°C
Protection	IP54
Terminations	Flying lead -1m or 0.5m multicore (dependant on model)
Mounting	Stainless steel "U" bracket
Weight	3.7kg
Construction	ABS
Colour	Cream

Product Codes

MSP-30T	Speaker, 30W, IP54, 100V transformer
MSP-30TPT8	Speaker, 30W, IP54, 100V transformer, Part 8 Compliant

SPH - 20T

Pendant Sphere

This elegant plastic sphere is the ideal system for providing high-quality sound in areas where conventional ceiling speakers are impractical. Typical applications include supermarkets, department stores and warehouses. The unit has a smooth omni-directional dispersion pattern, which helps to reduce hot spots and dead areas.

The SPH-20T has inputs for both transformer and 8 ohm matching. It is available in either black or white and comes complete with 3m of 8 core, screened cable.

Features

> Up to 107dB(A)
> Up to 20W
> ABS plastic
> Available in BS5839-8 Compliant versions
> 100V line transformer or 8 ohm operation

Technical Specifications

Model	SPH-20T
Power	20W (100V line)
Output	107dB(A) @ 20W
Sensitivity	94dB(A) @ 1W
Tappings (100V)	2.5, 5, 10, 20W
Frequency range	100-18,000Hz
Dispersion @ 1kHz	180° Vertical / 360° Horizontal
Temperature	- 20° to + 50°
Protection	IP54
Terminations	3m multicore lead / suspension cable
Mounting	Suspension via termination cable
Weight	2.4kg
Construction	ABS
BS5839-8	Option
Colour	Black or white

Product Codes

SPH-20T Black	Pendant sphere, Black, 20W
SPH-20T Part 8 Black	Pendant sphere, Black, 20W, Part 8 Compliant
SPH-20T White	Pendant sphere, White, 20W
SPH-20T Part 8 White	Pendant sphere, White, 20W, Part 8 Compliant

Fire

Products:

VoCall

The VoCall range of Emergency Voice Communications equipment is designed to fully comply with BS5839-Pt9:2003 (abb. Pt9) for use as a fire telephone system, disabled refuge call system or as a combined system when both fire telephones and disabled refuge points are required.

Fire Detection System Solutions

Emergency Voice Communication

COOPER Safety

CFVCC5

VoCall Compact Five Line EVCS Controller

The VoCALL Compact Emergency Voice Communications System (EVCS) is designed to fully comply with BS5839-Part 9:2003 for use as a Fire Telephone system, Disabled Refuge Call system or as a combined system when both Fire Telephones and Disabled Refuge Points are required.

An EVCS is a fixed, secure, bi-directional, full duplex voice communication system to assist fire fighters during emergencies in high rise buildings or large sites where radio communication cannot be guaranteed to work due to interference from the fire corona.

The standard covers the design, installation and operation of fire telephones and disabled refuge systems in buildings, and where both systems are fitted to a building specifies these should form a single system.

The VoCALL Compact 5 EVCS comprises of the master handset and up to five outstations, (type A fixed phones, type B refuge hands free points, or jack points in Far East and Middle East applications) as required.

VoCALL Compact is ideal for small buildings which are required to have an EVCS, but which have a limited number of outstations.

CFVCC5

Features

> Monitored handset
> Fully monitored supply and charger
> Up to 5 outstations per system
> 5 line keys, one fault accept
> 15 status LEDs
> Full duplex system
> No programming required
> Wall mount case
> BS5839 Part 9:2003 Compliant

The VoCALL Compact EVCS is self contained enclosure housing a master handset, five line exchange, power supply, battery charger and can be surface or semi-flush mounted as standard.

The case is made from powder coated zintec, with a smoked perspex door covering the handset. 20mm cable knockouts are provided for all necessary cables as well as space for the backup 12V SLA battery.

The unit is microprocessor controlled, but requires no programming on site; the panel is fitted with end of line resistors which are simply discarded when an outstation is connected.

Product Codes

CFVCC5	Five line EVCS controller

Typical application schematic

Technical Specifications

Power Supply and Charger	
ac input	230Vac +/- 10% 50/60Hz
Internal power supply	14V dc
Supply & battery	monitored, open, short, fuses
Protection	Deep discharge, short, thermal
Temperature compensation	YES
Battery size and type	1 x 12V 4.2Ahr
Mains fuse	240V 2A HRC
Battery fuse	1A PTC
Max charge current	250mA
Inputs	
Number of lines	5
Remote enable	Short to use
End of line	10kΩ

Outputs	
Number	2, fault & in-use
Type	Volt free relay
Contact	30V dc 1A
Controls	
Buttons	5 Zone keys, 1 acknowledge
Zone LEDs (x5)	1 Line status,1 fault status
Fault LEDs	3, ac, dc general
Outstation Cables	
Height	300mm
Width	350mm
Depth	90mm
Weight	6.5kg

VoCALL CFVCX8

Emergency Voice Communications System

The VoCALL Emergency Voice Communications System (EVCS) is designed to fully comply with BS5839-Part 9:2003 (abb. Pt9) for use as a Fire Telephone system, Disabled Refuge Call system or as a combined system when both Fire Telephones and Disabled Refuge Points are required.

An EVCS is a fixed, secure, bi-directional, full duplex voice communication system to assist fire fighters in an emergency in high rise buildings or large sites where Radio communication may not work, and covers the operation of both fire telephones and disabled refuge systems. Where both systems are fitted to a building pt9 specifies these should form a single system.

A VoCALL EVCS comprises of three functional blocks, the master handset (VCM) the eight line Exchanges (VCX-8) and outstations, (type A, type B or Jack points), with the quantities of these basic units being adjusted to suit the application.

Features

> Controls up-to 8 independent lines
> Mains powered
> Built in monitored 1A Charger for 12V SLA batteries
> Full duplex audio
> Up-to 32 exchanges per system
> Full line monitoring
> Serial port for configuration or updates
> Dry contact for fault or “In Use” indication
> Dual network ports
> Provides remote power for VCM master handsets
> Fully BS5839 pt9 2003 Compliant
> Twelve status LEDs
> Compact design for riser mounting

Technical Specifications

Physical	
Height:	296mm
Width:	210mm
Depth:	80mm
Weight:	1600g
Material:	Zintec, Texture powder coated RAL 7032
Power Supply	
Voltage:	230V ac ± 20%
Current:	11mA
Battery:	12V SLA 3.2Ah (Not supplied)
Charger:	1A Controlled impedance
Monitoring:	Open, short & high impedance cell
Processing	
Architecture:	AVR RISK
Clock:	16MHz
Memory:	4K Ram 20K EEProm 128K Flash
Monitoring:	125mS Asynchronous watchdog Checksum on EEPROM & flash

Product Codes

CFVCX8	VoCALL 8 line exchange unit

VoCALL CFVCM

Emergency Voice Communications System

The VoCALL Emergency Voice Communications System (EVCS) is designed to fully comply with BS5839-Part 9:2003 (abb. Pt9) for use as a Fire Telephone system, Disabled Refuge Call system or as a combined system when both Fire Telephones and Disabled Refuge Points are required.

An EVCS is a fixed, secure, bi-directional, full duplex voice communication system to assist fire fighters in an emergency in high rise buildings or large sites where Radio communication may not work, and covers the operation of both fire telephones and disabled refuge systems. Where both systems are fitted to a building pt9 specifies these should form a single system.

A VoCALL EVCS comprises of three functional blocks, the master handset (CFVCM) the eight line Exchanges (VCX-8) and outstations, (type A, type B or Jack points), with the quantities of these basic units being adjusted to suit the application.

CFVCWM

CFVCM

Features

> Monitored handset
> Large high contrast display (4x20 Character)
> 12 key quick dial keypad
> Full duplex system
> Up-to eight masters per system
> Directory dial function
> Full system event log (fault & configuration)
> Controls up-to 256 Lines (32 VCX-8 exchanges)
> 16 character unique name per line
> Dual network ports
> Remote powered
> Wall, desk or rack mount
> BS5839 pt9 2003 Compliant
> Eight status LEDs

Typical System

Using network communications combined with subscriber line telephone techniques, VoCALL provides large-scale cable savings, while not requiring a dedicated rack room to house a central exchange.

Control of the VoCALL EVCS is simplicity itself, the master console has a clear four line backlit display which shows the calling outstation name in plain text, and calls can be made to outstations by either dialling the number of the unit, or choosing the name from a text dialling directory.

The network comprises a line or ring of 8 cores (see below), each leg can be up-to 500M depending on cable type. A ring topology is recommended by 5839 pt9.

In line with the recommendations of BS5839 pt9 multiple master consoles can be fitted to VoCALL (up-to eight) with lockouts operating when a consoles are in use.

The stylish master console case is manufactured from brushed stainless steel with black aluminium rack wings and extruded aluminium guide rails, the case has been designed to mount directly on a wall or desk, or fitted into a rack using an optional mounting kit (occupies 6u of rack space).

Product Codes

CFVCM	VoCALL Master handset - desk/wall mounting
CFVCWM	VoCALL Master handset - wall mounting

Voice alarm systems

Type ‘A’ Handset

Features

> Compact design
> High volume ringer
> Status LED
> 20mm cable glands
> Telecoil for hearing impaired users
> Magnetic push catch
> Fully monitored
> Stainless steel option

CFVCFHP - Flush Mount

Roaming Handset (Middle and Far East Spec)

Features

> Flexible roaming phone
> High quality telephone jack
> Full duplex conversation
> Flexible 30cm roaming cable
> Telecoil for hearing impaired users
> Low noise, high quality telephone jack
> Fully monitored
> Stainless steel jack

CFVCRHS

Type ‘B’ Outstation

Features

> Hands free operation
> Compact design
> High volume ringer
> Flashing status LED
> 20mm cable glands
> Braille signage
> Duplex speech
> Fully monitored
> Stainless steel option

CFVCSHFSS

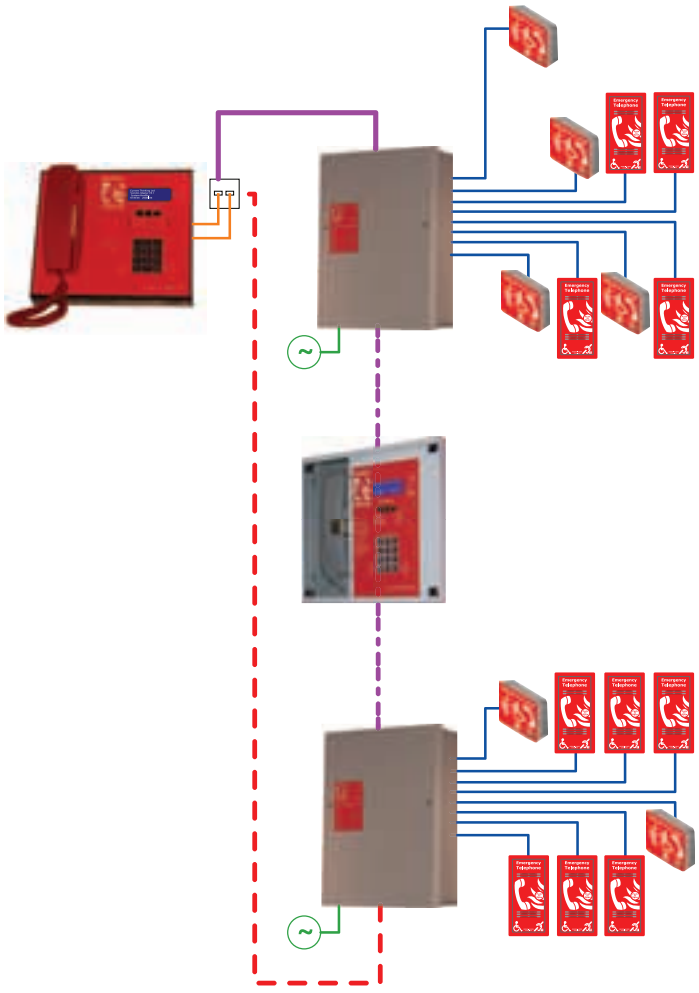
CFVCSHF

Product Codes

CFVCFHP	Type A flush handset
CFVCFHPSS	Type A flush handset, stainless steel
CFVCSHP	Type A surface handset
CFVCSHPSS	Type A surface handset, stainless steel
CFVCSHF	Type B surface hands free outstation, red
CFVCSHFG	Type B surface hands free outstation, green

CFVCSHFSS	Type B surface hands free outstation, S/S
CFVCFHB	Stainless steel bezel
CFVCIPA	Type A handset in lockable enclosure
CFVCHFS	Type A handset, uncased
CFVCRHS	Roaming handset-Middle and Far East spec
CFVCRJP	Jack plate, single gang-Middle and Far East spec

Typical application schematic



Technical Specifications

Physical	Desk/Wall	Rack
Height:	268mm	6u
Width:	275mm	485mm
Depth:	85mm	125mm
Weight:	1490g	
Materials:	Base: Stainless steel brushed Lid: Zintec, black powder coated Sides: Aluminium, black powder coated	
Power Supply		
Source:	Network Port x2	
Voltage:	11V to 18V dc	
Current:	88mA @ 12V	
Processing		
Architecture:	AVR RISK	
Clock:	16MHz	
Memory:	4K Ram 20K EEProm 128K Flash	
Monitoring:	125mS Asynchronous watchdog Checksum on EEPROM & flash	
Network Cables		
Grade:	Enhanced	
Cable (per Leg):	1 off four Pair (eg Draka 91-0245) or 2 off four core 1mm CSA soft skin or 4 off 1 Pair MICC twisted	
Distance (per leg):	500M soft skin types, 300M MICC	
Monitoring:	Data & phantom voltage	
Indication & Controls		
Fault LEDs:	4 off yellow (General, Panel, Supply & Exchange)	
Status LEDs:	4 off green (Healthy, ac, dc & network)	
LCD:	High contrast blue/white LCD, four line twenty-character 5x8 pixel format	
Keyboard:	12 Key telephone style	
Navigation:	3 Keys (down/left, Accept, up/right)	
Standards Compliance		
EMC:	EN55103-1, EN55103-2	
Product Family:	BS5839-pt9, BS5588-pt8	
Options		
Rack Mount Kit:	Part VCRM	

6

Products:

Conventional Panels
FX2200 Range
Detectors
Beam Detection/Callpoints
Bells/Sounders
Bi-Wire Panels
Repeater Panel/Detector
Callpoints/Sounders
Sounders/Beacons/Relay Modules
Extinguishing Control Panel

Fire Detection System Solutions

The Conventional Range

COOPER Safety

FX2200 Range

The FX2200CF range of conventional panels provide a simple yet effective installer and end user conventional fire detection system solution. Available as 2, 4 and 8-zone panels, with the 8-zone panel being configured for the provision of a repeater panel output as well as two additional alarm line outputs.

Features

> BOSEC 3rd party approved to latest:
EN54-2 1997, A1: 2006
EN54-4 1997, A1: 2002 and A2: 2006
> Choice of 2, 4 and 8-zone panels
> Single 12V dc battery requirement for 24-hour standby
> Single keypad access code for end user and engineer use
> Selectable fire/fault relay
> Class change facility
> Supports up to 32 detectors on each zone
> 'Same style' repeater panel available for 8-zone panel
> Simple 'one shot' end user test facility
> Maintenance free poly switch circuit protection
> Custom configured versions available of 2 and 4 zone panel

Technical Specifications

Model	FX2202CF	FX2204CF	FX2208CF
Standards	EN54-2 1997, A1: 2006 EN54-4 1997, A1: 2002 & A2: 2006		
Number of zones	2	4	8
Detectors per zone	32		
Number of alarm circuits	2		4
Alarm circuit load	150mA per circuit 0.3A total	400mA per circuit 0.8A total	500mA per circuit 2A total
End of line devices	Detection circuits: EOLM1 monitoring unit. Alarm lines: 6.8K resistor		
Auxiliary fire signal / fault output	5A 24V dc single pole changeover contacts		
Auxiliary dc output			24V dc fused. 30mA
Repeater port	No		Yes
Mains input voltage	230V ac –10% +15%		
System operating voltage	24V dc		
Standby duration	24 hours		
Battery (sealed lead acid)	1 x 3.2 Ah		2 x 3.2 Ah
Recharge period	24 hours		
Panel construction	Polycarbonate housing & back box		
Cable entries	Top: 12 x 20mm entries with blanking plugs - Rear cable entry aperture		
Environmental rating	IP30. -5°C to +40°C humidity 75% max (non condensing)		
Surface dimensions WxHxD (mm)	332 x 270 x 90mm		

NOTE: Repeater Panels available on standard 8 zone fire panels and configured on 2 & 4 zone fire panels

Product Codes

FX2202CF	2 zone panel
FX2204CF	4 zone panel
FX2208CF	8 zone panel
FXRP2200CF	Repeater panel

300 Series

A comprehensive range of conventional detectors are available for the FX2200CF range of fire detection panels.

CPD321

CPT341

CFR330

CMT360

CHT390

CDBB300

CIR301

Features

> LPCB 3rd party approved / CPD approved
> Low profile design
> 360° viewable LED design
> Removable detector chamber for cleaning
> Common mounting base
> New enhanced detectors feature Dual LEDs, Drift compensation and Chamber monitoring (CPD321 & CPT341)

Technical Specifications

Model	CPD321	CPT341	CFR330	CMT360	CHT390
CPD Approval	0832CPD0633	0832CPD0629	0832CPD0233	0832CPD0236	0832CPD0237
Description	Photoelectric Smoke Detector	Photo Thermal Smoke Detector	Heat Detector (Fast Response)	Heat Detector (Medium Response)	Heat Detector (High Temperature)
Standards	EN54 pt7:2000 + A1:2002	EN54 pt7:2000 + A1:2002 EN54 pt5:2000 + A1:2002	EN54 pt5:2000 + A1:2002		
Area coverage	100m² (subject to local standard)		50m² (subject to local standard)		
System wiring	2 core				
Indication	360˚ visibility pipe				
Mounting	Surface mount using CDBB300				
Compatibility	FX2200CF range of panels				
Detection mode	Light scatter principle	Light scatter principle & heat sensitive element	Heat sensitive element		
Operating voltage	15V to 30V dc				
Max stand-by current	30 µA	30 µA	30 µA		
Max start up current	340 µA	340 µA	NA		
Max alarm current	25 mA	25 mA	25 mA		
Alarm temperature	NA	60˚C		77˚C	92˚C
Heat class	NA	A2S	A2R	BS	CS
Environmental					
Application	Indoor use IP40	Indoor use IP40	Indoor use IP40	Indoor use IP40	Indoor use IP40
Temperature	-20˚C to 60˚C	-20˚C to 45˚C	-20˚C to 60˚C	-20˚C to 60˚C	-20˚C to 75˚C
Humidity	0-95% non condensing	0-95% non condensing	0-95% non condensing	0-95% non condensing	0-95% non condensing
EMC	CE marked	CE marked	CE marked	CE marked	CE marked
Construction					
Material	PC/ABS				
Colour	White				
Dimensions					
Excluding base	100mm(Dia) x 43mm(H)				
Including base	100mm(Dia) x 45mm(H)	101mm(Dia) x 55mm(H)			

Product Codes

CPD321	Photoelectric smoke detector
CFR330	Heat detector fast response (A1R)
CHT390	Heat detector high temperature (CS)
CIR301	Remote indicator
CPT341	Photo thermal ‘dual’ detector
CMT360	Heat detector medium response (BS)
CDBB300	Common base

Beam detection

The Cooper zone powered reflective beam detectors are specifically designed to function with all Cooper conventional panels.

Two versions are available, one with a range of up to 50 Metres, the other with a range of 50 - 100 Metres. The units are extremely simple to install and require no separate power supply.

MBD50R

Duct probe

The Duct Probe unit is designed for use with the Cooper range of conventional optical smoke detectors.

The presence of smoke in a ventilation duct is detected by sampling the airflow through the duct via two sampling tubes . A detector and base are mounted within the sampling chamber, which is located on the external skin of the duct, with sample and exhaust probes passing into the duct in an area of low turbulence. The unit requires a conventional optical detector and base and is supplied with full fixing instructions.

MDP201

CX Series

CPD APPROVED PRODUCT

Callpoints – CX201 and CX203

> Approved to EN54 -11
> Convenient clip fixed front cover
> One key for test and cover removal
> Available as flush, surface and weatherproof (IP65)

CX201

CX203

Technical Specifications

Model	CX201	CX203
CPD Approval	0832CPD084	0832CPD085
Configuration	Series resistor 680Ω	
Rating	24V dc	
Connection	4-way terminal block	
Operating method	Glass element with safety film	
Test facility	Unique key	
Construction	ABS	
IP Rating	IP42	IP67
Temp	-25°C to +55°C	
Dimensions WxHxD (mm)	86x86x20(S) 53(F)	110x110x65
Weight	0.19kg	0.29kg

Product Codes

MBD50R	Reflective beam detector (5-50 metre range)
MBD100R	Reflective beam detector (50-100 metre range)
MDP201	Duct mounting probe
CX201	Callpoint-surface
CX203	Callpoint-weather resistant
CXPC	Polycarbonate cover (pk of 10)
UBSG	Spare glass (pk of 5)

Bells

> Approved to EN54 pt 3
> High sound output
> Low current
> 4, 6 and 8-inch versions available

CFB4D24

CFB6D24

CFB8D24

Technical Specifications

Model	CFB4D24	CFB6D24	CFB8D24
CPD approval	0832CPD0135	0832CPD0134	
Operating voltage	18 to 30V dc		
Sound output	84dB(A) at 12V dc	93-95dB(A) at 24V dc	95-97dB(A) at 24V dc
Current consumption	20mA at 24V dc	25mA at 24V dc	28mA at 24V dc
Operating temperature	-10°C to +55°C		
Construction - Gong/Base	Steel/Polycarbonate		
Colour	Red		
IP rating	IP42		
Dimensions (mm)	110 (Dia) x 63 (D)	152 (Dia) x 63 (D)	203 (Dia) x 67 (D)
Weight	0.45kg	0.85kg	1.7kg

Roshni® ROLP

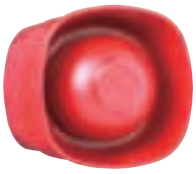
> Approved to EN54 pt 3
> Low current
> High sound output
> 32 selectable tones
> IP65 version available
> Lockable base

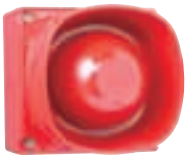
ROLP-R-S

ROLP-R-D

Symphoni®

> Approved to EN54 pt 3
> Ultra low current
> High sound output
> 3 Tones
> Volume control
> IP65 version available
> Lockable base


SY-R


SY-IP-R

Technical Specifications

Model	ROLP-R-S	ROLP-R-D	SYR	SYRIP
CPD Approval	0832CPD0131	0832CPD0128	0832CPD0141	0832CPD0141
Operating voltage	9 to 28V dc		12 to 30V dc	
Sound output	102dB(A) at 24V dc		100dB(A) at 24V dc	
Tones available	32		-	
Temperature	-25°C to +70°C		-25°C to +70°C	
Construction	ABS			
Colour	Red			
IP rating	IP54	IP65	IP42	IP66
Dimensions (mm)	93 (Dia) x 63 (D)	93 (Dia) x 93 (D)	110x110x95 WxHxD	110x110x105 WxHxD
Weight	0.24 kg	0.3 kg	0.58 kg	0.68 kg

Product Codes

CFB4D24	4” Bell
CFB6D24	6” Bell
CFB8D24	8” Bell

ROLPRS	Roshni sounder, shallow base
ROLPRD	Roshni sounder, deep base, weatherproof, IP65
SY-R	Symphoni sounder
SY-IP-R	Symphoni sounder, IP66

Sounders

Askari®

> Low current
> High sound output
> 32 tones
> Volume control
> Available in red (R) or white (W)

AC-W

Squashni

> Low current
> High sound output
> 32 Tones
> Volume control
> Available in red (R) or white (W)

SQ-W

Technical Specifications

Model	AC-W (R)	SQ-W (R)
Operating voltage	9 to 28V dc	10 to 28V dc
Sound output	97dB(A) at 24V dc	93dB(A) at 24V dc
Current consumption	18mA at 24V dc	18mA at 24V dc
Tones	32	32
Temperature	-25°C to +70°C	-25°C to +70°C
Construction	ABS	ABS
Colour	Red or white	Red or white
IP rating	IP54 (with backbox)	IP42
Dimensions (mm)	86 (W) x 86 (H) x 42 (D)	112 (Dia) x 30 (D)
Weight	0.11kg	0.15kg

CS200

> Low current
> High sound output
> 32 tones
> Clip fit base
> Available in red (R) or white (W)
> Lockable base

CS200W

Technical Specifications

Model	CS200W (R)
Operating voltage	10 to 28V dc
Current consumption	16mA at 24V dc
Sound output	100dB(A) at 24V dc
Tones	32
Volume control	20dB(A) range
Operating temperature	-10°C to +55°C
Construction	ABS
Colour	Red or white
IP rating	IP21C
Dimensions (mm)	112 (Dia) x 30 (D) mm
Weight	0.24kg

Product Codes

AC-W	Askari flush sounder - white
AC-R	Askari flush sounder - red
SQ-W	Squashni base sounder - white
SQ-R	Squashni base sounder – red
CS200W	Electronic sounder - white
CS200R	Electronic sounder - red

Flashni

> High output sounder beacon
> Volume control
> Lockable base

FL-RL-R-D

Technical Specifications

Model	FL-RL-R-S	FL-RL-R-D
Operating voltage	18 to 30V dc	
Sound output	101dB(A) at 24V dc	
Current consumption	68mA at 24V dc	
Operating temperature	-10°C to +55°C	
Construction	Lens - Polycarbonate, Base - ABS	
Colour	Red	
IP rating	IP42	IP66
Dimensions (mm)	93 (Dia) x 92 (D) mm	93 (Dia) x 121 (D) mm
Weight	0.29kg	0.33kg

Base AV unit

> Low profile design
> High output LED beacon
> Volume control
> Can be standalone unit or with detector & base
> Tamper-proof cover for standalone use

SQG3-AV-W

Technical Specifications

Model	SQG3-AV-W
Operating voltage	18 to 28V dc
Current consumption	10mA at 24V dc
Operating temperature	-10°C to +55°C
Light output	>1Cd
Flash rate	1Hz
Tones	5
Construction	ABS FR
Colour	White
IP rating	IP40
Dimensions (mm)	114 (Dia) x 35
Weight	0.11kg

Product Codes

FL-RL-R-S	Flashni sounder beacon, shallow base
FL-RL-R-D	Flashni sounder beacon, deep base
SQG3-AV-W	Base sounder beacon unit
SQG3-CAP	Base sounder beacon cover Pk of 5

Bi-Wire Range

The new Cooper range of Bi-Wire panels are designed with Cooper patented 2 wire technology (Patent Number GB2293257) and also includes 'Self-Check' detector features. Bi-Wire conventional detectors, sounders, LED strobes, including relay modules, all share the same zone wiring, delivering significant cost savings in both cable and installation costs.

All panels have the facility to flash detector LED's in a zone to facilitate the location of any wiring fault in that zone, thereby simplifying the fault finding process. The 4 and 8 zone panels provide enhanced features, which includes HMO programming per zone via the easily accessible DIP switch. If a Zone is programmed for HMO and a fire occurs in that zone, only the sounders in that zone will sound, if the fire is cleared within 2 minutes, the panel will reset automatically, otherwise the sounders in all the zones will operate.

4 and 8 zone

2 zone

Features

> Available in 2, 4, and 8 zones
> Self-Check features as standard
> Detectors, sounders and relay modules share same wiring
> HMO facility and repeater output on 4 and 8 zone panels
> Class change facility
> Selectable fire/fault relay
> Supports up to 20 sounders and 20 ancillaries per zone
> Detector removal indication as standard
> Maintenance-free poly switch circuit protection
> Weekly test/walk test facility

Technical Specifications

Model	UBFP2ZBW	UBFP4ZBWHMO	UBFP8ZBWHMO
Standards	EN54-2: 1998 & EN54-4:1998 EN50130-4: 1996 EN500081-1: 1992 & EN61000-2-2: 1994		
Number of zones	2	4	8
Detectors/sounders per zone	20-20		
Alarm circuit load	150mA per zone		
End of line devices	Active end of line monitoring unit		
Auxiliary fire signal/fault o/p	1A 24V dc single pole changeover contacts		
HMO facility	N/A	Yes (all zones)	
Mains input voltage	230V ac –10% +15%		
System operating voltage	24V dc		
Standby duration	24 hours		
Battery (sealed lead acid)	1 x 2.1 Ah 12V	1 x 3.2 Ah 12V	2 x 3.2 Ah 12V
Recharge period	24 hours		
Panel construction	Polycarbonate housing & back box		
Cable entries	Top: 12 x 20mm entries with blanking plugs, rear cable entry aperture.		
Environmental rating	IP30. -5°C to +40°C Humidity 75% max (non condensing)		
Dims WxHxD (mm)	260 x 212 x 72	332 x 270 x 92	

Product Codes

UBFP2ZBW	2 zone panel
UBFP4ZBWHMO	4 zone panel
UBFP8ZBWHMO	8 zone panel
FXRP2200BW	Repeater panel

FXRP2200BW

To complement the Bi-Wire range a repeater panel is available for connection to the 4 and 8 zone Bi-Wire panels.

FXRP2200BW

Features

> Repeater matches the style and appearance of main control panels

> Facility for signalling to repeater panel provided as standard on 8 zone panel

> Specially configured versions of 2 and 4 zone panels available for use with a repeater panel

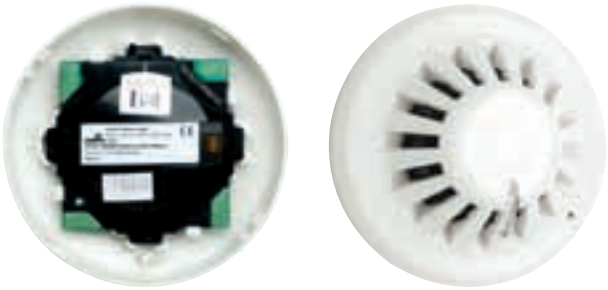
> Displays essential information at other key locations in a large building/site

- Zone fire and fault conditions
- Test mode in operation
- Zones or alarm lines in disabled mode

> Repeater panel requires only a single pair of wires to receive signals from main control panel, plus local mains power supply, reducing cost of installation

Bi-Wire detector

Cooper Fire is introducing a new range of Bi-Wire detectors consisting of a new revolutionary dual patent, multi-sensor detector which incorporates both Bi-Wire and Self-check features, as well as having 5 different modes within a single detector.



UBMSBW

Features

> Chamber monitoring and Drift Compensation Dual LED with 360° viewable design

> 5 modes in 1 detector

> Self check facility

> 360° viewable LED design

> Common mounting base

This new conventional detector can be configured to operate as either an optical detector, opto/heat multi-sensor or 1 of 3 heat detector modes (A1R, BS, CS) using the four position switch located at the back of the detector.

The detector, having self check facilities, has a dual LED indicator. The red LED is continuous to indicate alarm condition, the yellow LED is lit continuously to indicate a smoke sensing chamber fault or that the detector has reached the limit of its contamination compensating ability. This LED can also be pulsed from the panel to locate wiring faults thereby saving time and cost by facilitating the fault finding process.

CIR301

CDBB300

Product Codes

UBMSBW	Multi sensor detector
CDBB300	Base
CIR301	Remote indicator

Callpoints – FX201 and FX203

> Design approved to EN54 -11
> Convenient clip fixed front cover
> One key for test and cover removal
> Available as flush, surface and weatherproof (IP65)

FX201

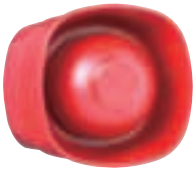
FX203

Technical Specifications

Model	FX201	FX203
CPD Approval	0832CPD084	0832CPD085
Configuration	Series resistor 680Ω	
Rating	24V dc	
Connection	4-way terminal block	
Operating method	Glass element with safety film	
Test facility	Unique key	
Construction	ABS	
IP Rating	IP42	IP67
Temp	-25°C to +55°C	
Dimensions WxHxD (mm)	86x86x20(S) 53(F)	110x110x65
Weight	0.19kg	0.29kg

Electronic sounder

> Ultra low current
> High sound output
> Volume control
> Lockable base


FX009

Detector base sounder

> Integral detector base
> Low current
> Can be used as standalone sounder

FXN521BWS

Technical Specifications

Model	FX009	FXN521BWS
Operating voltage	25 to 32V dc	
Sound output	100dB(A) at 24V dc	90dB(A) at 1 metre
Current consumption	5mA at 24V dc	8mA at 24V dc
Operating temperature	-25°C to +70°C	-10°C to +55°C
Construction	ABS	
Colour	Red	White
IP rating	IP42	IP40
Dimensions (mm)	105 (Dia) x 95(D)	102 (Dia) x 40 (D)
Weight	0.28kg	0.2kg

Product Codes

FX201	Flush/surface callpoint
FX203	Weatherproof callpoint (IP67)
MBGHCC	Plastic front cover
FX5G	Spare glasses Pk of 5
UBBGKEY3	Call point keys Pk of 10
FX009	Electronic sounder
FXN521BWS	Base sounder

LED Beacon

> High output LED beacon
> Low current

FXN004BW

Technical Specifications

Model	FXN004BW
Operating voltage	18 to 30V dc
Sound output	-
Current consumption	6mA at 24V dc
Operating temperature	-10°C to +55°C
Construction	Lens - Polycarbonate, Base - ABS
Colour	Red
IP rating	IP42
Dimensions (mm)	95 (Dia) x 53 (D)
Weight	0.1kg

Relay modules

> Connects on zone wiring
> Relay operates on any fire activation
> Zone powered (no external power required)

FXN01124V

FXN011230

Technical Specifications

Model	FXN01124V	FXN011230
Sets of contacts	1 set of change over contacts	
Contact rating	1A (24V dc)	3A (230V dc)
Colour	White	
IP rating	IP40	
Dimensions WxHxD (mm)	150x89x58	
Weight	0.2kg	

Product Codes

FXN004BW	LED beacon
FXN01124V	Relay module 24V dc switching
FXN011230	Relay module 230V ac switching

CF300X Range

The CF300X control panel is designed in accordance with european standards EN54-2 and EN54-4 fire detection and fire alarm systems control and indicating.

Approved to EN12094-1 fixed firefighting systems - components for gas extinguishing systems - Part 1.

The CF300X is compatible with all of the Cooper range of conventional detector, manual callpoint and sounders.
The control equipment is a combined fire alarm control panel and extinguishing system and has three detection zones, any or all of which are capable of contributing to the release decision.

Features

> Test condition
> Delay of the actioning of fire alarm devices (sounders)
> Fire alarm devices to enable an audible warning to be sounded throughout premises upon the detection of a fire condition or the operation of a manual callpoint
> Voltage free relay contacts for fire
> Delay of extinguishing signal of up to 60 seconds
> Signal representing the flow of extinguishing agent to indicate the released condition
> Monitoring of the status of components by way of a low pressure switch input
> Emergency hold device to enable the extinguishant delay time to be extended
> Control of flooding time to deactivate the releasing output after a set period of time
> Manual only mode to disable the release of extinguishant via automatic detection devices
> Triggering of equipment outside the system by way of first and second stage contacts, extract fan output
> Activation of alarm devices with different signals to indicate pre-discharge and released warnings using different sounds

BS EN12094-1 :
2003 Class A
KM 96761

Status units

CF300X-6LSU, CF300X-6LSU/S

> 6 Lamp status unit*

CF300X-6LSU-MS-M, CF300X-6LSU-MS-M/S

> 6 Lamp status unit with mode select & manual release*

CF300X-6LSU-MS, CF300X-6LSU-MS/S

> 6 Lamp status unit with mode select*

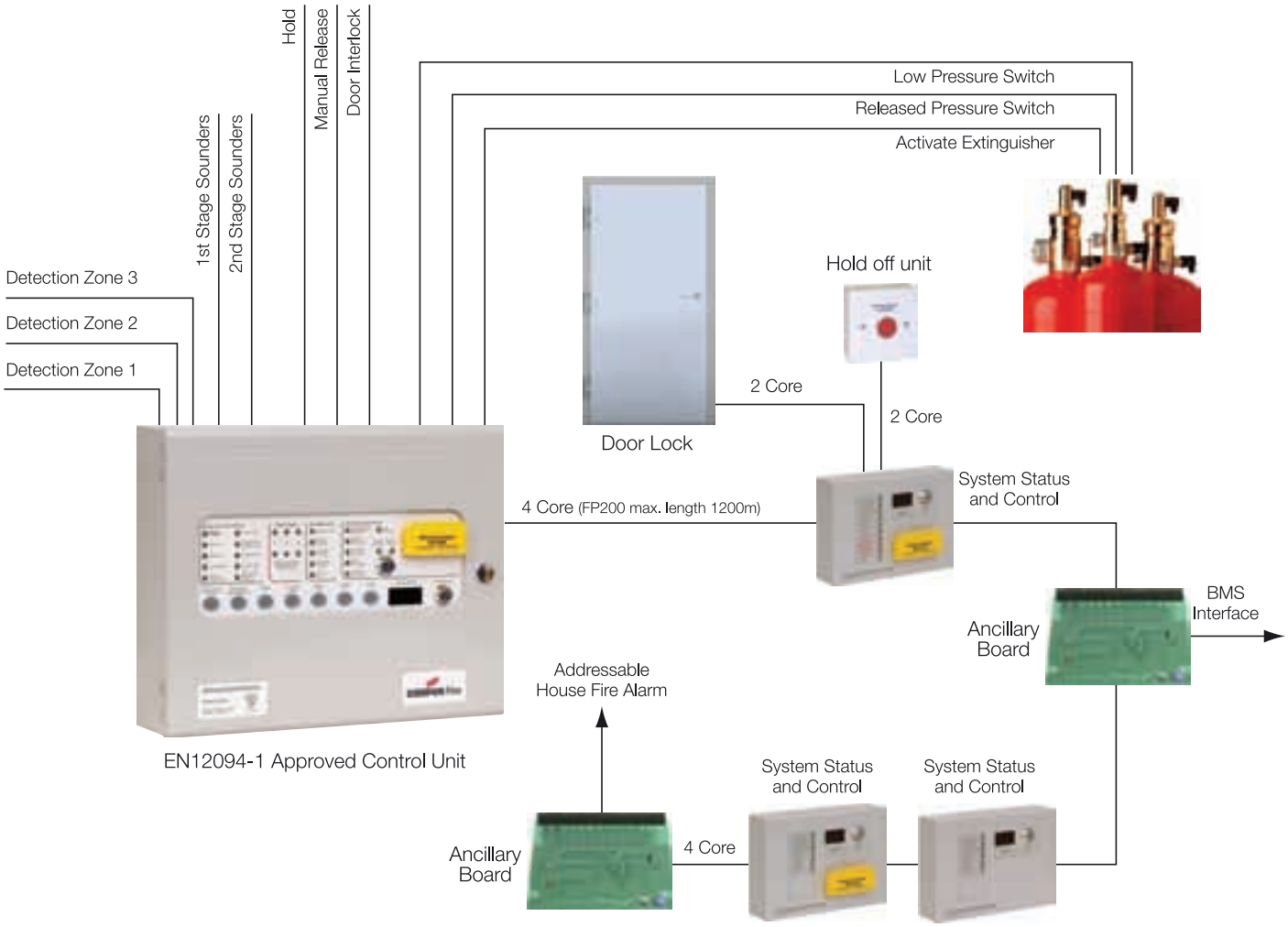
CF300X-10LSU-MS-M, CF300X-10LSU-MS-M/S

> 10 Lamp status unit with mode select & manual release*

* Status units available in IP enclosures, prefix WP.

COOPER Safety

Typical application schematic



Product Codes

CF300X	3 Zone control panel
CF300X-6LSU	6 Lamp status unit
CF300X-6LSU/S	6 Lamp status unit
CF300X-6LSU-MS	6 Lamp status unit, mode select
CF300X-6LSU-MS/S	6 Lamp status unit, mode select
CF300X-6LSU-MS-M	6 Lamp status unit, mode select, manual release
CF300X-6LSU-MS-M/S	6 Lamp status unit, mode select, manual release
CF300X-10LSU-MS-M	10 Lamp status unit, mode select, manual release
CF300X-10LSU-MS-M/S	10 Lamp status unit, mode select, manual release

7

Products:

Analogue Panels

Ultimate 2000
CF3000RM

Repeater Panel

Remote Annunciator

**Analogue Sensors/
Addressable Pull Stations**

300 Series

Audio Visual Devices

Interfaces

**Sounders/
Audio Visual Devices/Beacons**

Safepath

EVAC

Application Schematic

Ultimate Conventional Range

Ultimate Range

Conventional Detectors

Ancillaries

Fire Detection System Solutions

The **UL**timate Range

COOPER Safety

Cooper Fire Ultimate range of addressable, conventional fire panels and ancillary equipment are listed by ETL (intertek) testing laboratory to UL 864 9th Edition for use in fire alarm signalling in accordance with the latest National Fire Protection Association Standards (NFPA 72), the National Electric Code (NFPA 70), the Life Safety Code (NFPA 101) and / or the Local Authority having jurisdiction (AHJ).

Ultimate2000

The Ultimate 2000 is a high specification analogue fire alarm control panel, which is available in a 2 loop configuration. It combines sophisticated functionality yet simple operation with very aesthetically pleasing design.

The large capacity, ability to support complex cause and effect programming and wide range of user controllable function make the panels suitable for a wide range of commercial and industrial applications.

The Ultimate 2000 panel uses soft addressing to minimise installation time and remove the potential for errors associated with manual addressing. All of the Ultimate fire detection system components have been specifically designed to operate as part of an integrated system provides an assurance that the panel, detectors, interfaces and other ancillaries are all fully compatible with each other and that the full range of system functionality is supported by each device.

APPROVED TO UL864 9TH EDITION

Features

> 2 Loop Panel-Networkable
> Up to 150 addresses per loop
> Easy Programming
> Short Circuit Isolators Incorporated into each loop device

Technical Specifications

Standards	Approved to UL864 9th Edition
Model	Ultimate2000
Number of Loops	2
Networkable	Yes
Addresses per loop	150
Panel Sounder Circuits	4 Outputs NAC's
Programmable Relays	3
Alarm Relay	1
Trouble (Fault) Relay	1
Output Ports	RS485, RS232 & USB
Mains input voltage	110 / 230V ac
System Operating Voltage	24V dc
Battery	2 x 12V 7 Ah or 2 X 12V 12 Ah (dependent)
Cable Entries	4 Top-entry
	11 Right side
	2 left side
Environmental Rating	0°C to +49°C, 95% RH (non condensing)
Colour	Red
Size WxHxD (mm)	370 x 393 x 112
Weight	10kg

Product Codes

Ultimate2000	2 Loop analogue panel
Ultimate2000NC	2 Loop analogue panel C/W network card

CF3000RM

The Cooper CF3000RM panel offers a high-specification, analogue fire detection panel solution which is available in a 1, 2 or 4-loop configuration.

It combines sophisticated functionality, yet simple panel operation with a very aesthetically-pleasing metal enclosure design.

The large capacity, ability to support complex cause and effect programming and wide range of user-controllable functions make this panel suitable for a wide range of projects from sheltered housing to large office developments as well as many industrial applications.

NEW PRODUCT

Remote annunciator

The main control panel has a built-in annunciator and additionally supports up to eight remote annunciators.

These have the same control and display layout so as to match the appearance of the built-in annunciator. They have two levels of user codes therefore limiting the operating system programming to authorised personnel.

The annunciator has a 4 line with 64-character backlit LCD providing easy-to understand system messages and has an end-user, friendly membrane keypad as well as 5 system status LEDs for Alarm, Supervisory, Trouble, Silence and ac power.

The annunciator enclosure can be surface or flush mounted.

Features

> 64-character backlit LCD display (4 lines with 16 characters on each line)
> Membrane Keypad
> Accepts user codes or fire fighter's key (Optional)
> Larger keypad buttons for system Reset and Silence
> Install up to eight per FACP
> RS-485 interface to panel
> On-board Piezo sounder audibly indicates Alarms, Troubles and Supervisories
> Five status LEDs for Alarm, Supervisory, Trouble, Silence and ac power conditions
> Wiring lengths up to 1000 metres. from the FACP (depending on wire gauge and number of devices on RS485)

Technical Specifications

Standards	NFPA 72; UL864
Model	ULREP
Max Per System:	8
System Operating Voltage	16 - 26V dc
Standby Current	12 mA max
Alarm Current	30 mA
Wiring Distance	3,300 max. from FACP (depending on wire gauge and number of devices on the RS 485)
Environmental Operating Temperature	32°F –120°F (0°C – 49°C)
Humidity	10% – 93% non-condensing

Product Codes

CF3000RM	3000 Range analogue panel - red	ULREP	Remote annunciator

300 Series

A comprehensive range of analogue sensors are available to operate with the Cooper analogue addressable panel range with the following :-

UCAP320 – Photoelectric smoke sensor

UCAPT340 – Photo-thermal smoke sensor

UCAH330 – Multi-mode heat sensor

UCAB300 Common base

WBA – Conventional Wide Base

Features

> Built-in short circuit isolators
> Stylish low profile design
> 360° viewable LED design
> Removable detector chamber
> Drift compensation

Technical Specifications

Detector Head	UCAP320	UCAPT340	UCAH330
Base	WBA or UCAB300	WBA or UCAB300	WBA or UCAB300
Working Voltage	18 - 30V dc	18 - 30V dc	18 - 30V dc
Voltage Waveform	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz
Standby Current (Average)	220µA	220µA	220µA
Alarm Current (max)	5mA	5mA	5mA
Relay Current (max)	N/A	N/A	N/A
Start-up Time	2 seconds	2 seconds	2 seconds
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft	N/A
Sensitivity Use Checker	No-Climb TRUTEST UL Listing 77TL	Use No-Climb TRUTEST UL Listing 77TL	Use No-Climb TRUTEST UL Listing 77TL
Heat Element Rating	N/A	135°F	135°F ROR + Fixed + Fixed * 135°F Fixed * 194°F Fixed**
Reset Time (max)	2 seconds	2 seconds	2 seconds
Heat Detector Spacing	N/A	50ft (heat alone operation)	50ft
Ambient Temperature (max)	32-100°F	32-100°F	32-100°F 32-50°F (194°F setting)
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Compatibility Indentifier	W002	W002	W002

Addressable pull stations

The Cooper range of UL addressable pull stations are available as surface, flush and weatherproof versions. All pull stations have integral short circuit isolators fitted as standard. To simplify replacement of glass element pull stations are fitted with fast fit clip on front covers.

UMPS-100

UMPS-400X

The UMPS-400X is an explosion proof unit and requires interfaces and I/S barriers for safe operation in the relevant classified zones in accordance with NFPA72 standards.

Product Codes

UCAP320	Photoelectric smoke sensor
UCAPT340	Photo-thermal smoke sensor
UCAH330	Multi-mode heat sensor
UCAB300	Analogue base (UL)

WBA	Analogue wide base
UMPS-100	SPST, Single Action, Terminals, Key Reset
UMPS-400X	Explosion Proof, Single Action, Key Reset

COOPER Safety

UL Approved audio visual devices

General Features and Options:

> Universal Mounting Base - Mounts to 5 backbox types (Exceder)
> Strobe/Horn Synchronization
> Multi-Candela
> Approvals include: UL, ULC, FM, CSFM, MEA, BFP
> Weatherproof models -40°F to 150°F

HSR

HSWC

HNR

HNWC

STR

STWC

RSSWP-2475W-FR

RSSWP-2475C-FW

Technical Specifications

Horn Strobe Ratings per UL 1971 & UL 464 at 24 Vdc

		UL Max Current* at 99 dB(A)													
		24 Vdc												12 Vdc	
Mode	**Regulated Voltage Range Vdc**	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102		0.148	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 Vdc

		UL Max Current* at 95 dB(A)													
		24 Vdc												12 Vdc	
Mode	**Regulated Voltage Range Vdc**	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	

Horn Strobe Ratings per UL 1971 & UL 464 at 24 Vdc

		UL Max Current* at 90 dB(A)													
		24 Vdc												12 Vdc	
Mode	**Regulated Voltage Range Vdc**	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

Product Codes

HSR	Wall Mounted Horn Strobe
HSWC	Ceiling Mounted Horn Strobe
HNR	Wall Mounted Horn
HNWC	Ceiling Mounted Horn

STR	Wall Mounted Sync Strobe
STWC	Ceiling Mounted Sync Strobe
RSSWP-2475W-FR	Weatherproof Wall Mounted Sync Strobe
RSSWP-2475C-FW	Weatherproof Ceiling Mounted Sync Strobe

Interfaces

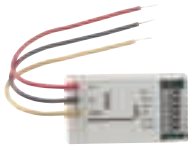
APPROVED TO UL864 9TH EDITION

Approved

UMSI850
Spur Isolator unit

UMIO324
3 channel I/O unit

UMSU840
Shop unit monitor



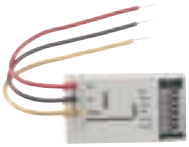
UMCIM-C
Single input module

An extensive range of interfaces are available for the Cooper range of analogue panels providing solutions for most design requirements. These devices are approved to UL864 9th Edition.

Standard

UMIU871
Zone monitor unit

UMPU424
4 Way sounder controller



UMIU872
Mini-zone monitor

UMCOM
Single output module

The above range of micro interfaces modules are also available.

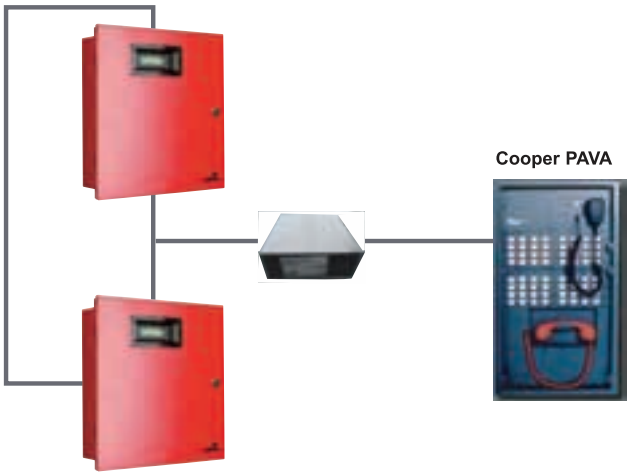
PA/VA Interface

The EC0232 PA/VA interface allows the Cooper CX-HMX-MP range of PA/VA systems to be fully integrated with our advanced range of addressable fire alarm control panels.

The interface can be located anywhere on the Cooper peer-to-peer network allowing information from any addressable fire alarm control panel to be routed through a bi-directional RS232 port to the PA/VA system.

Bi-directional link also allows the status of Cooper PA/VA system to be displayed and monitored at the fire alarm controller. Different messages can be played depending on the cause and effect programming.

For safe operation and system integrity, the PA/VA panel has an override input facility which can be connected directly to the conventional sounder circuit of the Cooper addressable fire alarm control panels.



Product Codes

UMSI850	Spur isolator unit
UMIU871	Zone monitor unit (Call point & detection zone)
UMIO324	3 Channel I/O unit
UMPU424	4 way sounder controller
UMSU840	Shop unit monitor
UMCIM-C	Single input module
UMCOM	Single output module
UMIU872	Mini-zone monitor

Network Interfaces

EC0232	PA/VA Interface

Network Interfaces (not shown in catalogue)

EC400	TCP/IP Interface
EC450	IP Fibre optic single mode
EC450MD	IP Fibre optic multi mode
EC540	Network booster
DF6000NETKIT	Network card
EC700	LON to mode bus gateway

NON UL APPROVED PRODUCT

Addressable sounders

Approved to EN54 Part 3

Base sounder

The CAS380 is a loop-powered integrated sounder and sensor mounting base.

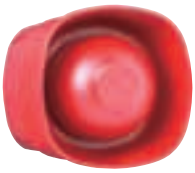
It can be used with any analogue sensor or as a standalone sounder with the optional CASC cover plate.

CAS380
Base sounder

Wall sounder

The CAS381 range of loop-powered addressable wall sounders offers a highly efficient, low current sounder option.

Sounder volume and tone are set at the analogue panel avoiding the need to access each sounder individually to alter settings.



CAS381
Wall sounder

CAS381WP
Wall sounder IP65

Audio visual units

Base sounder / beacon

The CASBB384 is a loop-powered, integrated sounder/beacon and sensor mounting base.

It can be used with any analogue sensor or as a standalone sounder with the optional CASC cover plate.

CASBB384
Sounder beacon base

Wall sounder beacons

The Cooper Fire range of loop-powered addressable wall-mounted sounder beacons offer a highly efficient, low current sounder beacon option.

Sounder volume and tone are set at the analogue panel avoiding the need to access each sounder individually to alter settings.
All sounder / beacons have integral built-in isolators.

CASB383
Sounder beacon

CASB383-WP
IP65 version

Beacons

Approved to EN54 Part 3

LED beacon

The CAB382 loop-powered addressable beacon offers high efficiency LED technology, integral built-in isolators, together with a low profile design for a discreet installation.

The beacon is designed to provide a visual indication in areas of high ambient noise or where people may be hard of hearing.

CAB382
LED beacon

Product Codes

		CPD Approved Product
CAS380	Base sounder	0832CPD0155
CAS381	Addressable wall sounder	0832CPD0156
CAS381WP	Addressable wall sounder - weatherproof	0832CPD0156
CASBB384	Base sounder beacon	
CASB383	Wall sounder beacon	
CASB383-WP	Wall sounder beacon - weatherproof	
CASC	Pk of 5 base sounder beacon covers	
CAB382	LED beacon	

Voice evacuation system

> Supervised Emergency Voice Evacuation, Paging, Messaging and Background music system
> Can be fully integrated with the WAVES MNS system for wide area indoor/outdoor alerting
> 8 standard messages
> Live Microphone override
> Real-time monitoring and reporting of all system components
> Approvals: UL Standard 864, 9th edition, UL Standard 1711, CSFM, MEA, FCC Part 15

Audio splitter

> Enables a single supervised speaker audio output to drive up to two Class A or 4 Class B supervised speaker audio outputs

Audio boosters

> Designed to provide for additional supervised audio power for live voice, pre-recorded messages or background music
> Available in 320, 160 and 80 watt versions

Volume control

> Allows manual volume setting for telephone paging and background music for a specific speaker or speaker zone

Remote microphone

> Provides for an additional microphone in a remote location
> Can be mounted up to 2,000 feet away from the SP40S
> Supervised hand held push to talk microphone

Addressable paging splitter & telephone zone controller

> Designed for the ability to access individual or multiple speaker zones throughout the SP40S system via telephone
> Custom user programmable

Remote microphone expansion module

> Expands one remote microphone from the SP40S to three remote microphones
> Can accept a line level input coupled with a contact closure for broadcasting of other information
> OSHA 1910.165, ADA, and UFC compliant

Local operator console

> Designed for indoor use with the SAFEPATH panels for mass notification applications
> Contains SAFEPATH SPRM remote microphone and push-on/push-off buttons
> Can be mounted up to 2,000 feet away from the SAFEPATH panel

LEMD Display

> Illuminated text sign designed to comply with requirements for mass notification systems
> Ideal for over the door of egress stairwells or other locations
> Two messages: Announcement or evacuate
> Steady or flashing message
> Meets IP 65 rating, sealed against dust and protected from water splashes

Series NPS push stations

> Designed for manual activation of SAFEPATH voice evacuation systems
> Available in five colours: Blue, green, red, white, or yellow
> Polycarbonate faceplate
> ADA Compliant
> Mounts to single gang electrical box

Product Codes

SP40S	Single ch system with 40W of supervised audio
BAT-1212	12 volt, 12-ampere hour battery
SP40S-PMK	8 Message programmed message Kit
AM-SP40S-SMK	After market 8 message standard message kit
AM-SP40S-PMK	After market 8 message programmed message kit
AM-SP40S-NBT	After market narrow band signal tone kit
SP-COA	C.O. port adapter for the SP40S
SP4Z-A/B	Audio splitter for the SP40S, SP40/2
SPMB4Z	Mounting bracket for the SP4Z-A/B
SPB-320	320W supervised audio power booster
SPB-160	160W supervised audio power booster
SPB-80/4	80W supervised audio power booster
SP4Z-APS	Addressable paging splitter
SP4-TZC	Telephone zone controller

TZC-USB	Programming cable
SPMB4Z	Speaker splitter mounting bracket
SP-SVC	Supervised volume control
SPRM	Remote microphone, red plate
SPRM-GP	General paging microphone
SP4-RMX	Remote microphone expansion module
SP4-LOC-SB	Surface mount local operator console
SP4-LOC-FB	Flush mount local operator console
SP4-LOC-KIT	HVAC Emergency shutoff switch kit
LEMD	LED Emergency message display
LEMD-M	LED Emergency message display (UL listed)
NPS-R	Push station for manual message activation
NPS-NO	Push station normally open contact
NPS-NC	Push station normally closed contact

Master distribution panel

The Cooper PA/VA Voice System operates in conjunction with the various Cooper Analogue Fire Alarm Control Panels (FACP) to provide automatic response within a building to various emergency situations.

The system includes all necessary features to provide and effective evacuation system. The system can be easily configured for various applications.

User friendly controls allow the Fire Department Authority to easily take command for evacuation or relocation procedures or emergencies. Emergency response teams can monitor the situation until professional help arrives at the scene.

The Cooper PA/VA system includes capacity for 6 channels of simultaneous audio, this flexibility provides for public address announcements, stay-in-place, evacuation, or automatic messages.

Warden Stations and Fire Fighters telephones can be configured as required, Area of Rescue can reassure physically challenged occupants that help is being dispatched to their location.

Features

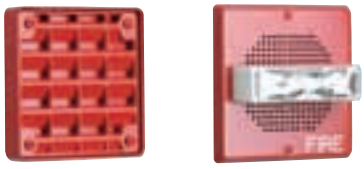
> Works with Analogue/Addressable and Microprocessor based Fire Alarm Panels
> Easy Installation and Operation
> Fully Supervised
> Natural Sound Voice Recordings
> Modular Systems - components added as needed
> Integrated 2 Channel Digital Message Repeater
> True Multiplex 6 Channel Distributed Audio
> Live Microphone Page to any zone
> Fast RS-485 Communications Protocol
> Integrated Fire Phone, Area of Rescue and Fan & Damper Control capability
> Up to 4 Minute Message Capability
> Works with 12Vdc or 24Vdc Fire Alarm Panel
> 3 Minute Message Restart on Microphone Key
> Built in Alarm and Alert Signals

Speaker and speaker strobes

The Cooper range of speaker and speaker strobes are designed for high-efficiency output to meet the needs of the life safety industry for voice and tone signalling.

Features

> Field selectable input voltage (25/70 VRMS)
> Field selectable taps from 1/8 to 8 watts (model specific)
> Standard backboxes
> Strobe/Horn Synchronization
> Multi-Candela
> Approvals include: UL, ULC, FM, CSFM, MEA, BFP
> Weatherproof models -40° to 150°F



ET70 Range

ET90 Range

Product Codes

EVACs Control Panels

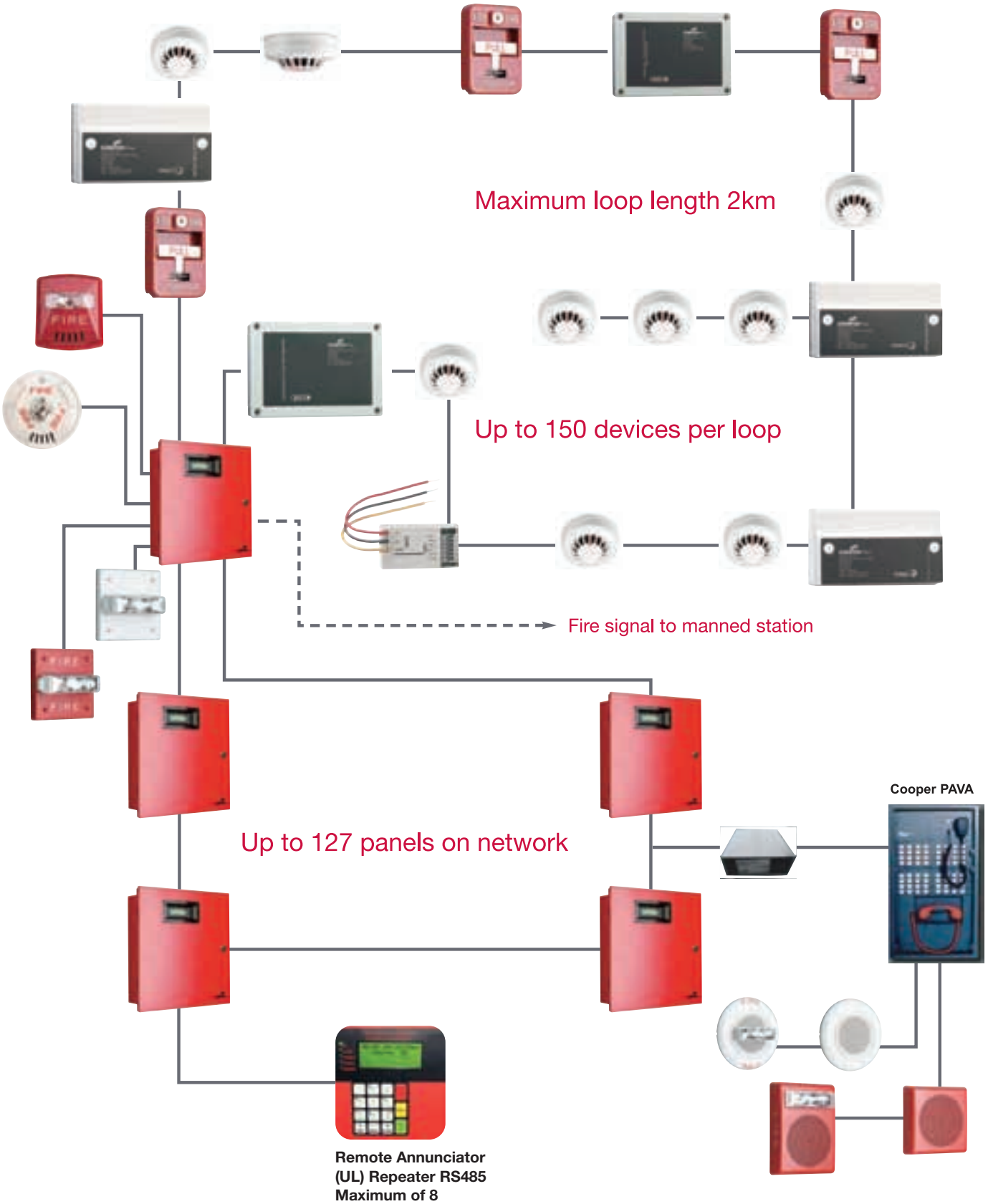
HMX-MP	Master panel (see distributor for full range)
HMX-DP	Distributor panel (see distributor for full range)

Speakers and Speakers/Strobes

E50 Range	Wall mounted speaker, semi-flush
E60 Range	Ceiling mounted speaker, semi-flush
E70 Range	Wall mounted speaker, flush
E90 Range	Ceiling mounted speaker, flush
E1010	Outdoor speaker

COOPER Safety

Typical analogue schematic with PA/VA interface



Ultimate conventional

The ultimate range of conventional fire panels provides a simple yet effective installer and end user fire detection system solution. Available as 2, 4, and 8 zone panels. The Ultimate range has a vast variety of functional features that makes it a very flexible and powerful fire control panel.

The Ultimate comes standard with either a 4 amp or 6 amp 24V dc smart power Supply, with dedicated alarm and fault relays, optional 4 NAC outputs, RS232 and RS485.

APPROVED TO UL864 9TH EDITION

Ultimate Conventional Panel

Features 2, 4 or 8 zones Class B (Style B) Supervised zone expanders and I/O modules can be mounted remotely from the main control panel.

Event History Buffer (250 events) with date/time stamp 6 selectable/programmable output patterns for notification appliance circuits Module Digital Alarm Communicator Transmitter (DACT) 4 Notification Appliance Circuits 3 programmable general purpose relays Fully programmable from the built-in membrane keypad, remote annunciator, or Windows® Ultimate downloading software Two RS232 ports Built-in walk test feature.

A viewing port in the keyed panel enclosure door leaves the system status LEDs and LCD display visible while maintaining system control key security. Built-in synchronization for appliances from Wheelock Easy to program.

Technical Specifications

Model	Ultimate 2	Ultimate 4	Ultimate 8
Standards	Approved to UL864 9th Edition		
Number of zones	2	4	8
Detectors per zone	20		
Panel sounder circuits	4 Outputs NAC's		
Programmable Relay's (NAC O/P's)	3	3	3
Alarm Relay	1	1	1
Trouble (Fault) Relay	1	1	1
Mains input voltage	110/230V ac	110/230V ac	110/230V ac
System operating voltage	24V dc		
Battery	2 x 12V Ah or 2 x 12V 12 Ah (dependent)		
Cable entries	4 Top Entry, 11 Right side, 2 Left side		
End of Line Resistor	4K7		
Environmental Rating	0ºC to +49ºC, 95% RH (non condensing)		
Colour	Red		
Side WxHxD (mm)	370 x 393 x 112		
Weight	10kg		

Product Codes

Ultimate 2	2 Zone conventional panel
Ultimate 4	4 Zone conventional panel
Ultimate 8	8 Zone conventional panel

Future Optional Accessories

FCM 10 Zone Expander
SRM Serial Relay Module

Remote annunciator

The main control panel has a built-in annunciator and additionally supports up to eight remote annunciators.

These have the same control and display layout so as to match the appearance of the built-in annunciator. They have two levels of user codes therefore limiting the operating system programming to authorised personnel.

The annunciator has a 4 line with 64-character backlit LCD providing easy-to understand system messages and has an end-user, friendly membrane keypad as well as 5 system status LEDs for Alarm, Supervisory, Trouble, Silence and ac power.

The annunciator enclosure can be surface or flush mounted.

Features

> 64-character backlit LCD display (4 lines with 16 characters on each line)
> Membrane Keypad
> Accepts user codes or fire fighter's key (Optional)
> Larger keypad buttons for system Reset and Silence
> Install up to eight per FACP
> RS-485 interface to panel
> On-board Piezo sounder audibly indicates Alarms, Troubles and Supervisories
> Five status LEDs for Alarm, Supervisory, Trouble, Silence and ac power conditions
> Wiring lengths up to 3300 ft. from the FACP (depending on wire gauge and number of devices on RS485)

Technical Specifications

Standards	NFPA 72; UL864
Model	ULREP
Max Per System:	8
System Operating Voltage	16 - 26V dc
Standby Current	12 mA max
Alarm Current	30 mA
Wiring Distance	3,300 max. from FACP (depending on wire gauge and number of devices on the RS 485)
Environmental Operating Temperature	32°F –120°F (0°C – 49°C)
Humidity	10% – 93% non-condensing

Product Codes

ULREP	Remote Annunciator

Conventional detectors

A comprehensive range of UL detectors are available for the ultimate control panels.

Features

> UL Approved detectors

> Low profile design

> 360° viewable LED design

> Removable detector chamber for cleaning

> Common mounting base

> New enhanced detectors feature Dual LEDs, Drift compensation and Chamber monitoring (UCPD-2W & UCPT-2W)

UCPD-2W
Photoelectric
smoke detector

UCPT-2W
Photo thermal
smoke detector

UCHT-2W
Fixed heat
detector 135ºF

UCHTI-2W
Fixed heat
detector 194ºF

UCHR-2W
Rate rise and fix heat
detector 135ºF

UCHRI-2W
Rate rise and fix heat
detector 194ºF

CB2E
Detector base

CB
Wide detector base

Technical Specifications

Detector Head	UCPD-2W	UCPT-2W	UCHT-2W	UCHTI-2W	UCHR-2W	UCHRI-2W
Type	Photoelectric 2 Wire	Opto/Heat Multi-Sensor 2 Wire	Fixed Heat Det 135ºF 2 Wire	Fixed Heat Det 194ºF 2 Wire	Rate of Rise & Fixed Heat 135ºF 2 Wire	Rate of Rise & Fixed Heat 194ºF 2 Wire
Base	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E	CB or CB2E
Working Voltage	15 - 30V dc	15 - 30V dc	15 - 30V dc	15 - 30V dc	15 - 30V dc	15 - 30V dc
Voltage Waveform	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz	Filtered dc +/- 1v max ripple @120Hz
Standby Current (Average)	95µA	95µA	70µA	70µA	70µA	70µA
Surge Current (max)	340µA	340µA	340µA	340µA	340µA	340µA
Alarm Current (max)	Must be Limited externally to 40mA	Must be Limited externally to 40mA	Must be Limited externally to 40mA	Must be Limited externally to 40mA	Must be Limited externally to 40mA	Must be Limited externally to 40mA
Relay Current (max)	N/A	N/A	N/A	N/A	N/A	N/A
Start-up Time	20 seconds	20 seconds	20 seconds	20 seconds	20 seconds	20 seconds
Sensitivity	2.55+/- 0.33%/ft	2.55+/- 0.33%/ft	N/A	N/A	N/A	N/A
Sensitivity Checker	Use No-Climb Use TRUTEST UL Listing 77TL	Use No-Climb Use TRUTEST UL Listing 77TL	Use No-Climb Use TRUTEST UL Listing 77TL	Use No-Climb Use TRUTEST UL Listing 77TL	Use No-Climb TRUTEST UL Listing 77TL	Use No-Climb Use TRUTEST UL Listing 77TL
Heat Element Rating	N/A	135ºF	135ºF	194ºF	135ºF	194ºF
Reset Time (max)	2 seconds	2 seconds	2 seconds	2 seconds	2 seconds	2 seconds
Heat Detector Spacing	N/A	50ft (heat alone operation)	50ft	50ft	50ft	50ft
Ambient Temperature (max)	32-100ºF	32-100ºF	32-100ºF	32-150ºF	32-100ºF	32-150ºF
Mounting Position	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas	Ceiling in open areas
Compatibility Indentifier	W001	W001	W001	W001	W001	W001

Product Codes

UCPD-2W	Photoelectric smoke detector
UCPT-2W	Photo thermal smoke detector
UCHT-2W	Fixed heat detector 135ºF
UCHTI-2W	Fixed heat detector 194ºF
UCHR-2W	Rate rise and fix heat detector 135ºF
UCHRI-2W	Rate rise and fix heat detector 194ºF
CB2E	Detector base
CB	Wide detector base

Conventional ancillary devices

UL Approved manual pull stations

> Approvals include UL standard
> Single or dual action
> Key reset
> Mounts on single gang back box
> High-gloss red enamel finish

UCMPS-100
UCMPS-200

UCMPS-400X

UL Approved audio visual devices

General Features and Options:

> Universal Mounting Base - Mounts to 5 backbox types (Exceder)
> Strobe/Horn Synchronization
> Multi-Candela
> Approvals include: UL, ULC, FM, CSFM, MEA, BFP
> Weatherproof models -40°F to 150°F

HSR

HSWC

HNR

HNWC

STR

STWC

RSSWP-2475W-FR

RSSWP-2475C-FW

Technical Specifications

Horn Strobes		
HSR	Wall Mounted	12/24 Vdc, 15/1575/30/75/95/110/135/185cd, 90/95/99dB(A)
HSWC	Ceiling Mounted	12/24 Vdc, 15/30/60/75/95/115/150/177cd, 90/95/99dB(A)
Horns		
HNR	Wall Mounted	12/24 Vdc, 90/95/99dB(A)
HNWC	Ceiling Mounted	12/24 Vdc, 90/95/99dB(A)
Synchronised Strobes		
STR	Wall Mounted	12/24 Vdc, 15/1575/30/75/95/110/135/185cd
STWC	Ceiling Mounted	12/24 Vdc, 15/1575/30/75/95/110/135/185cd
Outdoor Synchronised Strobes		
RSSWP-2475W-FR	Outdoor Wall Mounted	Synchronisation strobe 75cd
RSSWP-2475C-FW	Outdoor Ceiling Mounted	Synchronisation strobe 75cd

Product Codes

UCMPS-100	SPST, Single Action
UCMPS-200	SPST, Double Action
UCMPS-400X	Explosion Proof, Single Action

HSR	Wall Mounted Horn Strobe
HSWC	Ceiling Mounted Horn Strobe
HNR	Wall Mounted Horn
HNWC	Ceiling Mounted Horn
STR	Wall Mounted Synchronised Strobe
STWC	Ceiling Mounted Synchronised Strobe
RSSWP-2475W-FR	Weatherproof Wall Mounted Synchronised Strobe
RSSWP-2475C-FW	Weatherproof Ceiling Mounted Synchronised Strobe

NON UL APPROVED PRODUCT

Bells - (EN54-3)

CPD Approval - 0832CPD0135 & 0832CPD0134

> High sound output
> Low current
> 4, 6 and 8-inch versions available

CFB4D24

CFB6D24

Roshni® Electronic Sounder - (EN54-3)

CPD Approval - 0832CPD0131 & 0832CPD0128

> Low current
> 32 selectable tones
> Lockable base
> High sound output
> IP65 version available

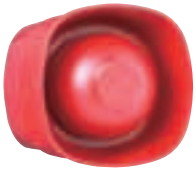
ROLP-R-S

ROLP-R-D

Symphoni® Electronic Sounder

CPD Approval - 0832CPD0141 & 0832CPD0141

> Ultra low current
> 3 tones
> IP65 version available
> High sound output
> Volume control
> Lockable base



SY-R

SY-R-IP

Base Sounder

> Low current
> High sound output
> Volume control

SQG3-SDR-W

Base Sounder Beacon

> High output LED beacon
> Can be standalone unit or with detector & base
> Tamper-proof cover for standalone use
> Volume control

SQG3-AV-W

Flashni Sounder Beacon

> High output sounder beacon
> Volume control
> Lockable base

FL-RL-R-D

Product Codes

CFB4D24	4 Inch bell
CFB6D24	6 Inch bell
ROLP-R-S	Roshni sounder - shallow base
ROLP-R-D	Roshni sounder - deep base
SY-R	Symphoni sounder
SY-IP-R	Symphoni sounder - weatherproof
SQG3-SDR-W	Base sounder
SQG3-AV-W	Base sounder beacon
FL-RL-R-D	Flashni sounder beacon

COOPER Safety

Analogue

Cooper Part No.	Menvier Part No.	JSB Part No.	Description
CF30001G	DF60001	FX60001	1 Loop panel
CF30002G	DF60002	FX60002	2 Loop panel
CF30004G	DF60004	FX60004	4 Loop panel
CF30001GP	DF60001P	FX60001P	1 Loop panel, c/w printer
CF30002GP	DF60002P	FX60002P	2 Loop panel, c/w printer
CF30004GP	DF60004P	FX60004P	4 Loop panel, c/w printer
CF30001GNC	DF60001NC	FX60001NC	1 Loop panel c/w network card
CF30002GNC	DF60002NC	FX60002NC	2 Loop panel c/w network card
CF30004GNC	DF60004NC	FX60004NC	4 Loop panel c/w network card
CF30001GPNC	DF60001PNC	FX60001PNC	1 Loop panel c/w printer, network card
CF30002GPNC	DF60002PNC	FX60002PNC	2 Loop panel c/w printer, network card
CF30004GPNC	DF60004PNC	FX60004PNC	4 Loop panel c/w printer, network card
CF3000PRG	DF6000PR	FX6000PR	Repeater panel - loop connected
CF3000PRGNC	DF6000PRNC	DF6000PRNC	Repeater panel - network connected
	CTPR3000		Repeater panel - fully functional, network connected
CF2000G	-	-	2 Loop panel
CF2000GNC	-	-	2 Loop panel c/w network card
CF1100	DF6100	-	1 Loop panel
CF1100NC	DF6100NC	-	1 Loop panel c/w network card.
CF1200	DF61002	-	2 Loop panel
CF1200NC	DF61002NC	-	2 Loop panel with network card
CBG370S	MBG813	FXN501	Addressable manual call point (surface)
CBG370WP	MBG817	FXN503	Weatherproof addressable callpoint
CAP320	MAP820	FXN723	Addressable optical smoke detector
CAH330	MAH830	FXN725	Addressable thermal detector
CAPT340	MAOH850	FXN722	Addressable combined heat smoke detector
CAB300	MAB800	FXN720	Addressable detector base
	MAB100R		Addressable loop powered 100M beam detector
	MAB50R		Addressable loop powered 50M beam detector
CSI350	MSI850	FXN513	Spur Isolator unit
CIO351	MIO324	FXN510	3 channel input / output unit
CZMU352	MIU871	FXN512	ZMU (zone monitor unit)
CMIO353	MIO1240	FXN511	Mains rated Input / output unit
CSC354	MPU424	FXN515	4 Channel sounder controller module
CSUM355	MSU840	FXN516	Shop interface unit
-	MCIM	-	Mini input module
-	MCIM-C	-	Mini input module
-	MCIM-NF	-	Mini input module-non fire input
-	MCOM	-	Mini output module
-	MCOM-S	-	Mini output module-reset on silence
-	MCOM-R	-	Mini output module-reset on reset
-	MIU872	-	Mini zone monitor module
CAS380	MAS850	FXN538LBS	Loop powered base sounder
CAS381	MAS850LPS	FXN538LPS	Loop powered wall mounted sounder
CAS381WP	MAS850LPSWP	FXN538LPSWP	Weatherproof loop powered wall mounted sounder
CASBB384	MASB870	-	Loop powered combined base mounted sounder / beacon
CASB383	MASB860	-	Loop powered combined wall mounted sounder / beacon
CASB383WP	MASB860WP	-	W/P Loop powered combined wall mounted sounder / beacon
CAS382	MAB870	FXN338BCN	Loop powered beacon.
DF6000PKIT	DF6000PKIT	DF6000PKIT	Printer kit (retro fit)
DF6000NETKIT	DF6000NETKIT	DF6000NETKIT	Network kit (retro fit)
-	ZPCB2252-MML	-	LED Master output PCB
-	ZPCB2252-MSL	-	LED Slave output PCB
-	ZPCB2252-MMR	-	Relay Master output PCB
-	ZPCB2252-MSR	-	Relay Slave output PCB
-	CGI420	-	4-20mA Interface
-	CGI420R	-	4-20mA Interface with relay output
-	ZPCB2232	-	96 Zone LED repeater PCB
-	ZPCB2222	-	Loop splitter unit
-	LP800KIT	-	Loop tester
-	LP800KIT-OP	-	Loop tester-Open protocol
-	CF800	-	Programmer (800 series)
-	CF800-OP	-	Programmer open protocol (800 series)

Brand Conversion Chart

Radio Fire

Cooper Part No.	Menvier Part No.	JSB Part No.	Description
CW9000	-	-	Fire panel
CWB9500	-	-	Booster panel
CWH9600	-	-	Hybrid panel
CWC950	-	-	Callpoint
CWD910	-	-	Multi sensor
CWD920	-	-	Multi sensor / sounder / beacon
CWSB980	-	-	Wall mounted sounder / beacon
CWIF930	-	-	3 Channel input/output interface
CW500	-	-	Survey kit

Conventional

Cooper Part No.	Menvier Part No.	JSB Part No.	Description
FX2202CF	-	FX2202	2 Zone (low cost) conventional panel
FX2204CF	-	FX2204	4 Zone (low cost) conventional panel
FX2208CF	-	FX2208	8 Zone conventional panel (24hr) standby
FXRP2200CF	-	FXRP2200	Repeater panel
-	MF9302	-	2 Zone conventional panel (72hr) standby
-	MF9304	-	4 Zone conventional panel (72hr) standby
-	MF9308	-	8 Zone conventional panel (72hr) standby
-	MF9308L	-	8 Zone conventional panel (24hr) standby
-	MF9316	-	16 Zone conventional panel (72hr) standby
-	MF9316L	-	16 Zone conventional panel (24hr) standby
-	MFR9308	-	8 Zone repeater panel
-	MFR9316	-	16 Zone repeater panel
CPD321	MPD821	FXN533	Conventional optical smoke detector
CPT341	MPT951	FXN632	Combined optical smoke / heat
CFR330	MFR830	FXN525	Conventional heat detector R of R
CMT360	MMT860	FXN524	Conventional heat detector 77°C
CHT390	MHT890	FXN526	Conventional heat detector 90°C
-	MDB800	-	Conventional detector base-resistive EOL
CDBB300	-	FXN520	Conventional detector base-active EOL
-	MDB800R	-	Conventional detector base with relay-resistive EOL
FXN520R	-	FXN520R	Conventional detector base with relay-active EOL
CIR301	-	FX251D	Remote indicator
-	DRF0225-1	-	Conventional 100M beam detector (require 24V)
-	DRF0225-2	-	Conventional 50M beam detector (require 24V)
-	MBD100R	-	Conventional 100M beam detector (zone powered 1 per circuit)
-	MBD50R	-	Conventional 50M beam detector (zone powered 1 per circuit)
-	MBG914	-	Manual callpoint
-	MBG917	-	Conventional weatherproof callpoint
CX201	-	FX201	Manual callpoint
CXPC	MBGHCC	-	Plastic hinged cover
CX203	-	FX203	Conventional weatherproof callpoint
CFB6D24	MBM246	FX006	24v 6" internal bell - red
ROLPRD	MWS424/DB	FX002 + FX000WP	Conventional sounder 105dB(A) - red
FLRLRD	MCD524/DB	FX002/CR + FX000WP	Conventional sounder / beacon
CS200R	-	-	Conventional sounder - red
CS200W	-	-	Conventional sounder - white
SORSR3	MXB124/DB	FX004R + FX000WP	Conventional beacon (red)
SQG3SDRW	MDS824	-	Base mounted conventional sounder - white
SQG3AVW	MDS824B	-	Base mounted conventional sounder / beacon - white

Bi Wire

Cooper Part No.	Menvier Part No.	JSB Part No.	Description
UBFP1ZBW	-	FX2201BW	Single zone Bi-Wire panel
UBFP2ZBW	-	FX2202BW	2 zone Bi-Wire panel
UBFP4ZBWHMO	-	FX2204BWHMO	4 zone Bi-Wire panel
UBFP8ZBWHMO	-	FX2208BWHMO	8 zone Bi-Wire panel
UBMSBW	-	FXN922	Bi-Wire 'multi' sensor detector
CDBB300	-	FXN520	Base
CX009	-	FX009	High output wall mounted Bi-Wire sounder
CXN004BW	-	FXN004BW	Bi-Wire beacon
CXN011230	-	FXN011240	Bi-Wire 230V contacts relay
CXN01124V	-	FXN01124V	Bi-Wire 24V contacts relay
CXN520BWS	-	FXN520BWS	Bi-Wire sounder base
CASC	-	FXN538COV	Sounder base cover

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All goods supplied are subject to the company's general conditions of sale which are available on request.

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